

C/O PAULA

Access DB#

99443

# SEARCH REQUEST FORM

Scientific and Technical Information Center

~~Serial~~ #2

Requester's Full Name: Maury Audet Examiner #: 79808  
Art Unit: 1654 Phone Number: 305-5039  
Mail Box & Bldg/Room Locat.: CM1-11D13; 11D04 Results Format Preferred: PAPER

Date: 7/17/03 Follow-up  
Serial Number: 09/734,583

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*  
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: \_\_\_\_\_

Inventors (please provide full names): \_\_\_\_\_

Earliest Priority Filing Date: 12/19/90

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

PLEASE SEARCH (Formulas I-IV) (per approx cl's) - ALL CL's.

Cl 1, etc. Proposed Novelty → Building thru 'N' of at least  
1 A.A. of Building Unit of  
Somatostatin Analog.

(INVENTOR SEARCH ALREADY DONE)

Tx

MAURY

## STAFF USE ONLY

Searcher: Sheppard  
Searcher Phone #: 308-4499  
Searcher Location: \_\_\_\_\_  
Date Searcher Picked Up: \_\_\_\_\_  
Date Completed: 7/22/03  
Searcher Prep & Review Time: \_\_\_\_\_  
Clerical Prep Time: \_\_\_\_\_  
Online Time: \_\_\_\_\_

## Type of Search

NA Sequence (#) \_\_\_\_\_  
AA Sequence (#) \_\_\_\_\_  
Structure (#) \_\_\_\_\_  
Bibliographic \_\_\_\_\_  
Litigation \_\_\_\_\_  
Fulltext \_\_\_\_\_  
Patent Family \_\_\_\_\_  
Other \_\_\_\_\_

## Vendors and cost where applicable

STN \_\_\_\_\_  
Dialog \_\_\_\_\_  
Questel/Orbit \_\_\_\_\_  
Dr.Link \_\_\_\_\_  
Lexis/Nexis \_\_\_\_\_  
Sequence Systems \_\_\_\_\_  
WWW/Internet \_\_\_\_\_  
Other (specify) \_\_\_\_\_

4 searches  
 1 13 Ents Hcaplus  
 2 8 Registry  
 3 5 Hcaplus  
 4 8 Registry

=&gt; fil hcaplus

FILE 'HCAPLUS' ENTERED AT 15:33:24 ON 21 JUL 2003

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 21 Jul 2003 VOL 139 ISS 4

FILE LAST UPDATED: 20 Jul 2003 (20030720/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L44 126 SEA FILE=REGISTRY ABB=ON PLU=ON [G'BAL''DAB''ACA'] [FY].WK[TG'

ABU'SCVAF] [FA'NLE'C]/SQSP

L45 8 SEA FILE=REGISTRY ABB=ON PLU=ON L44 AND CYCL?

L46 13 SEA FILE=HCAPLUS ABB=ON PLU=ON L45

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=&gt; d ibib abs hitrn 146 1-13

L46 ANSWER 1 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:793646 HCAPLUS

DOCUMENT NUMBER: 137:295256

TITLE: Preparation of cyclic peptides as somatostatin agonists

INVENTOR(S): Coy, David H.; Rajeswaran, Walajapet G.

PATENT ASSIGNEE(S): The Administrators of the Tulane Educational Fund, USA

SOURCE: PCT Int. Appl., 43 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002081499	A2	20021017	WO 2002-US10882	20020408
WO 2002081499	A3	20030508		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,

TJ, TM  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,  
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,  
BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001 282526P P 20010409

OTHER SOURCE(S): MARPAT 137:295256

AB The invention is directed to cyclic peptides A1-cyclo[Cys-A2-D-Trp-A3-A4-Cys]-A5-Y1 [A1 is an optionally-substituted D- or L-arom. .alpha.-amino acid or D- or L-cyclo(C3-6)alkylalanine; A2 is an optionally-substituted arom. .alpha.-amino acid or cyclo(C3-6)alkylalanine; A3 is Lys or Orn; A4, A5 = .beta.-hydroxyvaline, Ser, hSer, or Thr; Y1 is OH, NH2 or alkylamino; the substituent on the arom. .vsigma.-amino acid or cyclo(C3-6)alkylalanine is selected from halogen, NO2, OH, CN, alkyl, alkenyl, alkynyl, alkoxy, Bzl, O-Bzl, or an amino group; the amine nitrogen of each amide peptide bond and the amino group of A1 is optionally substituted with a Me group (there is at least one Me group)] and their pharmaceutically-acceptable salts for use as somatostatin agonists. The solid-phase method was applied to the synthesis of 18 cyclic peptides of the invention, including NMe-D-Phe-cyclo[Cys-Phe-D-Trp-Lys-Thr-Cys]-Thr-NH2 (1). Peptide 1 showed binding affinities Kd for cloned human sst1-5 receptors of 316 .+-. 11, 1.03 .+-. 0.26, 17.9 .+-. 2.5, >1.000, and 4.89 .+-. 1.4 nM, resp., and agonist activity IC50 = 0.32 .+-. 0.13 nM on culture rat pituitary cells.

IT 72127-62-9DP, N-Me derivs.

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of cyclic peptides as somatostatin agonists)

L46. ANSWER 2 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:692513 HCAPLUS

DOCUMENT NUMBER: 138:117735

TITLE: Human somatostatin receptor specificity of backbone-cyclic analogs containing novel sulfur building units

AUTHOR(S): Gazal, Sharon; Gellerman, Gary; Ziv, Ofer; Karpov, Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michel; Gilon, Chaim

CORPORATE SOURCE: Department of Organic Chemistry, Hebrew University, Jerusalem, 91904, Israel

SOURCE: Peptides: The Wave of the Future, Proceedings of the Second International and the Seventeenth American Peptide Symposium, San Diego, CA, United States, June 9-14, 2001 (2001), 626-627. Editor(s): Lebl, Michal; Houghten, Richard A. American Peptide Society: San Diego, Calif.

CODEN: 69DBAL; ISBN: 0-9715560-0-8

DOCUMENT TYPE: Conference

LANGUAGE: English

AB The synthesis and the biol. properties of novel disulfide bridged backbone cyclic somatostatin analogs were examd. These analogs were prepd. to investigate the influence of the ring size and ring chem. on the binding profile of a parent analog named PTR 3173. PTR 3173 is 1000-fold more potent in the in vivo inhibition of growth hormone (GH) than of glucagon and 10,000-fold more potent inhibitor of GH than of insulin release. This pharmacol. property is ascribed to the unique binding profile of PTR 3173 and it was suggested that the binding to a specific combination of somatostatin receptors and not a single receptor detcs. the physiol. properties of the SST analog. Studies of binding of PTP 73 disulfide-bridged, backbone cyclic analogs to SSTR receptors suggest the effect of ring chem., ring size, and ring position of the peptide template on receptor binding selectivity. The disulfide analogs of PTR 3173 were also highly resistant to a broad spectrum of proteolytic activity compared

to somatostatin that was degraded within a few minutes.

IT 252845-45-7, PTR 3213 252845-47-9, PTR 3219  
252845-48-0, PTR 3221

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL  
(Biological study)

(somatostatin receptor specificity of backbone-cyclic analogs contg.  
novel sulfur building units)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 3 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:332670 HCAPLUS

DOCUMENT NUMBER: 136:341003

TITLE: Preparation of conformationally constrained backbone  
cyclized somatostatin analogs

INVENTOR(S): ~~Hornik~~, Vered; Afargan, Michel M.; Gellerman, Gary

PATENT ASSIGNEE(S): Israel

SOURCE: U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of Appl.  
No. PCT/IL99/00329.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 10

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002052315	A1	20020502	US 2000-734583	20001213
US 6051554	A	20000418	US 1998-100360	19980619
US 6355613	B1	20020312	US 1998-203389	19981202
WO 9965508	A1	19991223	WO 1999-IL329	19990615

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,  
DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,  
JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,  
MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,  
TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,  
MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,  
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:  
US 1998-100360 A2 19980619  
US 1998-203389 A2 19981202  
WO 1999-IL329 A2 19990615  
US 1995-488159 A2 19950607  
US 1995-569042 A2 19951207  
US 1996-690609 A2 19960731

OTHER SOURCE(S): MARPAT 136:341003  
GI

Q-R5-R6-R7-R8-R9-R10-R11-NR12-X



I

AB Novel peptides, e.g., I [n = 1-5; X designates a terminal carboxy acid,  
amide or alc. group; Q is H or a mono- or disaccharide; R5 is  
.gamma.-aminobutyric acid, diaminobutyric acid, Gly, .beta.-Ala,  
5-aminopentanoic acid, or aminohexanoic acid; R6 is D- or L-Phe or Tyr; R7  
is D- or L-Trp, -Phe, -1-Nal (1-naphthalenealanine) or -2-Nal, or Tyr; R8  
is D- or L-Trp; R9 is D- or L-Lys; R10 is Thr, Gly, Abu (2-aminobutanoic

APPL



acid), Cys, Val, D- or L-Ala or -Phe; R11 is D- or L-Phe, -Ala, Nle, or Cys; R12 is Gly, Val, Leu, D- or L-Phe or 1Nal or 2Nal], are disclosed which are conformationally constrained backbone cyclized somatostatin analogs having somatostatin receptor sub-type selectivity. Thus, Phe(C3)-Cys\*-Phe-D-Trp-Lys-Thr-Cys\*-Phe-Phe(N3)-OH (PTR 3205), where one bridge connects the two building units (Phe-C3 and Phe N3, which are phenylalanine modified with carboxy or amine and a three carbon methylene spacer) and the second is a disulfide bridge formed between the two Cys residues, was prepd. by the solid-phase method and showed IC50 = 10-6 nM for inhibition of SRIF binding to transmembranal somatostatin receptors SST-R1, SST-R3 and SST-R5.

IT 252845-45-7P, PTR 3213 252845-47-9P, PTR 3219  
252845-48-0P, PTR 3221

RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of conformationally constrained backbone cyclized somatostatin analogs)

L46 ANSWER 4 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:276518 HCAPLUS  
DOCUMENT NUMBER: 136:304089  
TITLE: Method of treating insulin insensitivity and syndrome X  
INVENTOR(S): Cawthorne, Michael Anthony; Liu, Yong-ling; Sennitt, Matthew V.  
PATENT ASSIGNEE(S): UK  
SOURCE: U.S. Pat. Appl. Publ., 15 pp.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002042374	A1	20020411	US 1998-76948	19980513
PRIORITY APPLN. INFO.: MARPAT 136:304089			US 1997-46373P	P 19970513

OTHER SOURCE(S): > 1 yr. (top/b) date

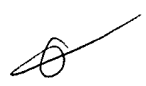
AB The present invention relates to a method of treating insulin resistance or syndrome X in a patient. The method includes the step of administering a therapeutically effective amt. of a somatostatin or a somatostatin agonist to said patient. Among examples provided are: binding of several somatostatin agonists to human somatostatin receptors, improvement of insulin sensitivity in BIM-23268-treated fatty Zucker rats, and redn. of hypertriglyceridemia by BIM-23268C in obese Zucker rats.

IT 72127-62-9  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(somatostatin and somatostatin agonists in treatment of insulin insensitivity and syndrome X)

L46 ANSWER 5 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:197431 HCAPLUS  
DOCUMENT NUMBER: 136:386384  
TITLE: Human Somatostatin Receptor Specificity of Backbone-Cyclic Analogues Containing Novel Sulfur Building Units  
AUTHOR(S): Gazal, Sharon; Gelerman, Garry; Ziv, Ofer; Karpov, Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michel; Gilon, Chaim  
CORPORATE SOURCE: Department of Organic Chemistry, Hebrew University, Jerusalem, 91904, Israel  
SOURCE: Journal of Medicinal Chemistry (2002), 45(8),

? Doesn't say cyclized poss.



1665-1671

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER:

American Chemical Society

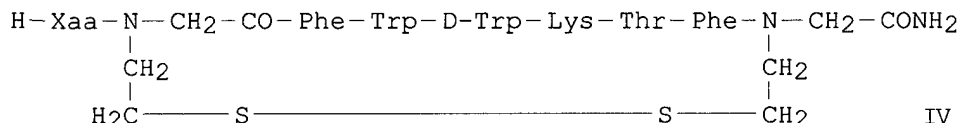
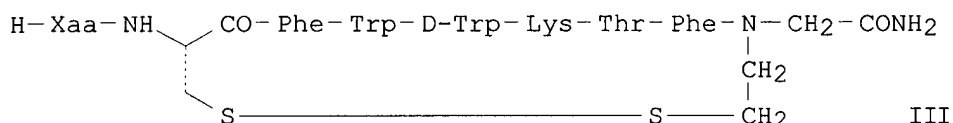
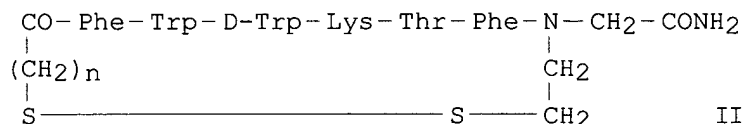
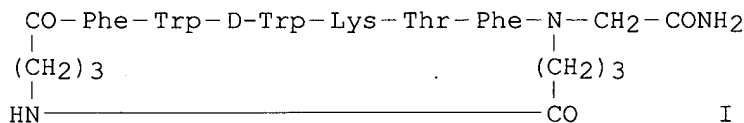
DOCUMENT TYPE:

Journal

LANGUAGE:

English

GI



AB Somatostatin-14 (somatostatin) and its clin. available analogs (octreotide, lanreotide and vapreotide) are potent inhibitors of growth hormone, insulin, and glucagon release. Recently, the synthesis of PTR-3173 (I), a novel cyclic somatostatin analog with in vivo endocrine selectivity, was described. I exhibited high affinity to human recombinant somatostatin receptors (hsst) hsst2, hsst4 and hsst5. Its novel binding profile included potent in vivo inhibition of growth hormone but not of insulin release. Here, the synthesis, bioactivity, and structure-activity relationship studies of peptides II (n = 1, 2), III (Xaa = nil, D-Phe) and IV (Xaa = nil, D-Phe, D-Nal) are reported and compared to those of I. In II-IV, the lactam bridge of I was replaced by a backbone disulfide bridge. II-IV showed significant metabolic stability as tested in various enzyme mixts. The receptor binding assays for II-IV revealed that their selectivity had increased towards hsst2 and hsst5, but decreased towards hsst4 in comparison to I. In addn., this work also described the synthesis of sulfur-contg. building units, such as Ac<sub>m</sub>-S-CH<sub>2</sub>CH<sub>2</sub>N(Fmoc)CH<sub>2</sub>CO<sub>2</sub>H (Ac<sub>m</sub> = acetamidomethyl), for incorporation into peptides as groups capable of forming disulfide bridges.

IT 252845-45-7P 252845-47-9P 425428-86-0P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);

BIOL (Biological study); PREP (Preparation)

(prepn. and receptor-binding activity of disulfide-bridged somatostatin analogs)

REFERENCE COUNT:

25

THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 6 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:560059 HCAPLUS

DOCUMENT NUMBER: 135:132468  
 TITLE: Method of inhibiting fibrosis with a somatostatin or somatostatin agonist  
 INVENTOR(S): Culler, Michael D.; Kasprzyk, Philip G.  
 PATENT ASSIGNEE(S): Biomeasure Inc., USA  
 SOURCE: U.S., 16 pp., Cont.-in-part of U.S. Ser. No. 705,790, abandoned.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

*8 Say  
Cephalopods  
Pom.*

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6268342	B1	20010731	US 1999-254097	19990510
WO 9808529	A1	19980305	WO 1997-US14154	19970827
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 2001011072	A1	20010802	US 2001-761605	20010116
PRIORITY APPLN. INFO.:			US 1996-705790	B2 19960830 (b) aut
			WO 1997-US14154	W 19970827
			US 1999-254097	A3 19990510

OTHER SOURCE(S): MARPAT 135:132468  
 AB The invention discloses a method of inhibiting fibrosis in a patient. The method comprises administering a therapeutically effective amt. of a somatostatin, a somatostatin agonist, or a pharmaceutically acceptable salt thereof, to the patient.  
 IT **72127-62-9**  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (somatostatin or somatostatin agonist for fibrosis inhibition)  
 REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 7 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1999:811096 HCAPLUS  
 DOCUMENT NUMBER: 132:50250  
 TITLE: Preparation of conformationally constrained backbone cyclized somatostatin analogs  
 INVENTOR(S): Hornik, Vered; Afargan, Michel M.; Gellerman, Gary  
 PATENT ASSIGNEE(S): Peptor Ltd., Israel  
 SOURCE: PCT Int. Appl., 82 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 10  
 PATENT INFORMATION:

APPL.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9965508	A1	19991223	WO 1999-IL329	19990615
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,				

TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,  
MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,  
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6051554	A	20000418	US 1998-100360	19980619
US 6355613	B1	20020312	US 1998-203389	19981202
CA 2335488	AA	19991223	CA 1999-2335488	19990615
AU 9942884	A1	20000105	AU 1999-42884	19990615
AU 747515	B2	20020516		
EP 1085896	A1	20010328	EP 1999-957020	19990615

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, FI

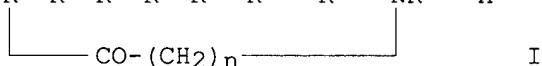
JP 2002518339	T2	20020625	JP 2000-554387	19990615
US 2002052315	A1	20020502	US 2000-734583	20001213

## PRIORITY APPLN. INFO.:

US 1998-100360	A	19980619
US 1998-203389	A	19981202
US 1995-488159	A2	19950607
US 1995-569042	A2	19951207
US 1996-690609	A2	19960731
WO 1999-IL329	W	19990615

OTHER SOURCE(S): MARPAT 132:50250  
GI

Q-R<sup>5</sup>-R<sup>6</sup>-R<sup>7</sup>-R<sup>8</sup>-R<sup>9</sup>-R<sup>10</sup>-R<sup>11</sup>-NR<sup>12</sup>-X



AB Novel peptides, e.g., I [n = 1-5; X designates a terminal carboxy acid, amide or alc. group; Q is H or a mono- or disaccharide; R<sup>5</sup> is .gamma.-aminobutyric acid, diaminobutyric acid, Gly, .beta.-Ala, 5-aminopentanoic acid, or aminohexanoic acid; R<sup>6</sup> is D- or L-Phe or Tyr; R<sup>7</sup> is D- or L-Trp, -Phe, -1-Nal (1-naphthalenealanine) or -2-Nal, or Tyr; R<sup>8</sup> is D- or L-Trp; R<sup>9</sup> is D- or L-Lys; R<sup>10</sup> is Thr, Gly, Abu (2-aminobutanoic acid), Cys, Val, D- or L-Ala or -Phe; R<sup>11</sup> is D- or L-Phe, -Ala, Nle, or Cys; R<sup>12</sup> is Gly, Val, Leu, D- or L-Phe or 1Nal or 2Nal], are disclosed which are conformationally constrained backbone cyclized somatostatin analogs having somatostatin receptor sub-type selectivity. Thus, Phe(C3)-Cys\*-Phe-D-Trp-Lys-Thr-Cys\*-Phe-Phe(N3)-OH (PTR 3205), where one bridge connects the two building units (Phe-C3 and Phe N3, which are phenylalanine modified with carboxy or amine and a three carbon methylene spacer) and the second is a disulfide bridge formed between the two Cys residues, was prepd. by the solid-phase method and showed IC<sub>50</sub> = 10<sup>-6</sup> nM for inhibition of SRIF binding to transmembranal somatostatin receptors SST-R1, SST-R3 and SST-R5.

IT **252845-45-7P**, PTR 3213 **252845-47-9P**, PTR 3219  
**252845-48-0P**, PTR 3221

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of conformationally constrained backbone cyclized somatostatin analogs)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 8 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:670109 HCAPLUS

DOCUMENT NUMBER: 131:295567

TITLE: Inhibition of Helicobacter pylori proliferation

INVENTOR(S): Kaneko, Hiroshi; Mitsuma, Terunori; Yamashita, Koichi;  
Morgan, Barry  
PATENT ASSIGNEE(S): Biomeasure, Inc., USA  
SOURCE: U.S., 19 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5968903	A	19991019	US 1998-74117	19980507
WO 9956769	A2	19991111	WO 1999-US10058	19990506
WO 9956769	A3	20001109		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9939754	A1	19991123	AU 1999-39754	19990506
EP 1075273	A2	20010214	EP 1999-922851	19990506
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
JP 2002513769	T2	20020514	JP 2000-546793	19990506
NO 2000005588	A	20010105	NO 2000-5588	20001106
PRIORITY APPLN. INFO.: US 1998-74117 A1 19980507 (a) WO 1999-US10058 W 19990506 (e)				

OTHER SOURCE(S): MARPAT 131:295567

AB The present invention is directed to a method of using somatostatin or a somatostatin agonist to inhibit the proliferation of Helicobacter pylori (H. pylori), which comprises administering to a patient in need thereof an effective amt. of said somatostatin or somatostatin agonist. Preferably, a somatostatin sub-type receptor 2 (SSTR-2) selective somatostatin agonist is administered in a method of this invention. The inhibition of H. pylori proliferation is useful in treating various gastroduodenal diseases such as peptic ulcers, gastric cancer and gastric lymphoma.

IT 72127-62-9

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(inhibition of Helicobacter pylori proliferation with somatostatin or a somatostatin agonist)

REFERENCE COUNT: 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 9 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: (1998)764305 HCAPLUS

DOCUMENT NUMBER: 130:20992

TITLE: Somatostatin and somatostatin agonists for treating insulin insensitivity and Syndrome X  
Cawthorne, Michael Anthony; Liu, Yong-Ling; Sennitt, Matthew V.

PATENT ASSIGNEE(S): Societe De Conseils De Recherches Et D'Applications Scientifiques S.A. (S.C., Fr.

SOURCE: PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

Poss.  
Cyclic?

Older  
Same as  
4/13

Poss.  
Cyclic?

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9851332	A1	19981119	WO 1998-EP3000	19980513
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9880198	A1	19981208	AU 1998-80198	19980513
EP 980253	A1	20000223	EP 1998-928308	19980513
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRIORITY APPLN. INFO.:			US 1997-854943	19970513
			WO 1998-EP3000	19980513
OTHER SOURCE(S): MARPAT 130:20992				
AB The present invention relates to a method of treating insulin resistance or Syndrome X. The method includes the step of administering a therapeutically effective amt. of a <u>somatostatin or a somatostatin agonist</u> to said patient. The invention also includes pharmaceutical compns. comprising a somatostatin or somatostatin agonist and the use of such products in the prepn. of such compns.				
IT 72127-62-9				
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)				
(somatostatin and somatostatin agonists for treating insulin insensitivity and Syndrome X)				
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT				
L46 ANSWER 10 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN				
ACCESSION NUMBER: 1998:764304 HCAPLUS				
DOCUMENT NUMBER: 130:20991				
TITLE: Somatostatin and somatostatin agonists for decreasing body weight				
INVENTOR(S): Cawthorne, Michael Anthony; Liu, Yong-Ling; Sennitt, Matthew V.				
PATENT ASSIGNEE(S): Societe De Conseils De Recherches Et D'Applications Scientifiques S.A. (S.C., Fr.				
SOURCE: PCT Int. Appl., 41 pp.				
CODEN: PIXXD2				
DOCUMENT TYPE: Patent				
LANGUAGE: English				
FAMILY ACC. NUM. COUNT: 1				
PATENT INFORMATION:				

Same as 43  
9/13

Cycled?

less prep.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9851331	A1	19981119	WO 1998-EP2999	19980513
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9876550	A1	19981208	AU 1998-76550	19980513

EP 981363 A1 20000301 EP 1998-924317 19980513

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, FI

PRIORITY APPLN. INFO.:

US 1997-854941

~~19970513-~~

WO 1998-EP2999

19980513

OTHER SOURCE(S): MARPAT 130:20991

AB The present invention relates to a method of decreasing body wt. in a patient. The method includes the step of administering a therapeutically effective amt. of a somatostatin or a somatostatin agonist to said patient. A pharmaceutical/cosmetic compn. comprises the somatostatin or somatostatin agonist. Such products are used to prep. such compns. for the redn. of body wt. in a human or mammalian animal.

IT 72127-62-9

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(somatostatin and somatostatin agonists for decreasing body wt.)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 11 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:163467 HCAPLUS

DOCUMENT NUMBER: 128:226683

TITLE: Method of inhibiting fibrosis with a somatostatin agonist

INVENTOR(S): Culler, Michael D.; Kasprzyk, Philip G.

PATENT ASSIGNEE(S): Biomeasure Incorporated, USA; Culler, Michael D.; Kasprzyk, Philip G.

SOURCE: PCT Int. Appl., 61 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION.NO.	DATE
WO 9808529	A1	19980305	WO 1997-US14154	19970827
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9741490	A1	19980319	AU 1997-41490	19970827
AU 726731	B2	20001116		
EP 938328	A1	19990901	EP 1997-939392	19970827
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
CN 1229357	A	19990922	CN 1997-197671	19970827
JP 2001500483	T2	20010116	JP 1998-511678	19970827
ZA 9707783	A	19990301	ZA 1997-7783	19970829
US 6268342	B1	20010731	US 1999-254097	19990510

PRIORITY APPLN. INFO.:

US 1996-705790

A2 19960830

/02(6)

WO 1997-US14154 W 19970827

OTHER SOURCE(S): MARPAT 128:226683

AB The present invention relates to a method of inhibiting fibrosis in a patient. The method comprises administering a therapeutically effective amt. of a somatostatin, a somatostatin agonist or a pharmaceutically acceptable salt thereof to said patient.

IT 72127-62-9

Cydris ?

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(method of inhibiting fibrosis with a somatostatin agonist)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 12 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1980:6946 HCAPLUS

DOCUMENT NUMBER: 92:6946

TITLE: Cyclopeptides

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.

SOURCE: Jpn. Kokai Tokkyo Koho, 35 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

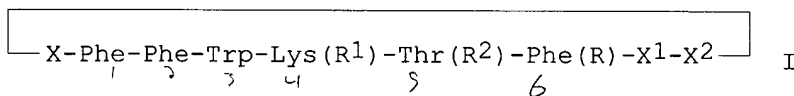
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

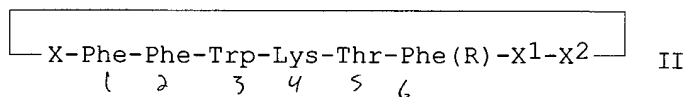
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 54059293	A2	19790512	JP 1978-119839	19780928
JP 62018560	B4	19870423		
US 4238481	A	19801209	US 1978-942565	19780915
FI 7802907	A	19790329	FI 1978-2907	19780925
FI 68246	B	19850430		
FI 68246	C	19850812		
DD 140142	C	19800213	DD 1978-208064	19780925
EP 1295	A2	19790404	EP 1978-100994	19780926
EP 1295	B1	19820317		
EP 1295	A3	19790613		
R: BE, CH, DE, FR, GB, NL, SE				
ES 473677	A1	19800516	ES 1978-473677	19780926
CA 1111841	A1	19811103	CA 1978-312129	19780926
IL 55643	A1	19811231	IL 1978-55643	19780926
NO 7803268	A	19790329	NO 1978-3268	19780927
NO 148957	B	19831010		
NO 148957	C	19840118		
DK 7804284	A	19790329	DK 1978-4284	19780927
DK 151034	B	19871012		
DK 151034	C	19880222		
ZA 7805488	A	19790926	ZA 1978-5488	19780927
AU 7840229	A1	19800403	AU 1978-40229	19780927
AU 523050	B2	19820708		
AT 7806982	A	19820715	AT 1978-6982	19780927
AT 370090	B	19830225		
HU 29669	O	19840228	HU 1978-CI1860	19780927
HU 184612	B	19840928		
PRIORITY APPLN. INFO.: GI			LU 1977-78191	19770928

Q  
Somatostatin?



6 unsubst  
poss



AB Protected cyclopeptides I [Phe(R) = ring (un)substituted phenylalanine; R<sup>1</sup> = .epsilon.-amino-protecting group, H; R<sup>2</sup> = hydroxy-protecting group, H; X



= Asn, bond; X1 = .omega.-aminoalkanecarboxylic acid residue, bond; X2 = .omega.-aminoalkanecarboxylic acid residue, bond; Trp = halo or nitro ring substituted D-, L-tryptophan] were deprotected to give II. Thus, 195 mg I [R = H, R1 = CO<sub>2</sub>CMe<sub>3</sub>, R2 = CMe<sub>3</sub>, X = Asn, X1 = NH(CH<sub>2</sub>)<sub>3</sub>CO, X2 = bond, Trp = D-Trp] was treated with 1.5 mL F3CCO<sub>2</sub>H-H<sub>2</sub>O-thioglycolic acid (8.9:10:1) at 25.degree. for 90 min to give the corresponding II (no yield given).

IT 72127-62-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

L46 ANSWER 13 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1979:122057 HCAPLUS

DOCUMENT NUMBER:

90:122057

TITLE:

Decapeptide analogs of somatostatin

INVENTOR(S):

Immer, Hans U.; Abraham, Nedumparambil A.

PATENT ASSIGNEE(S):

Ayerst, McKenna and Harrison Ltd., Can.

SOURCE:

U.S., 10 pp.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

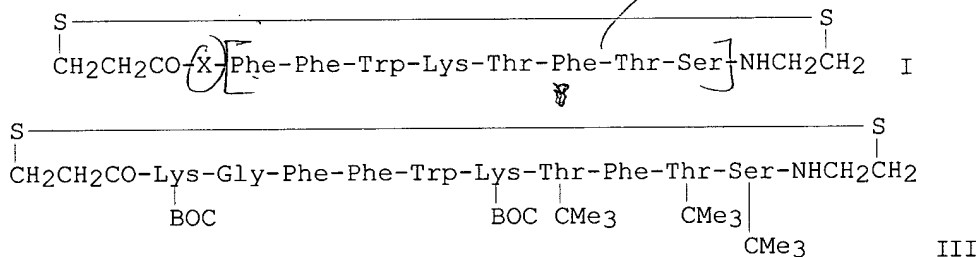
LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4118380	A	19781003	US 1977-818500	19770725
PRIORITY APPLN. INFO.: GI			US 1977-818500	19770725



AB Somatostatin analogs I (X = Gly-Asn, Lys-Gly), useful as inhibitors of the release of growth hormone (GH), were prepd. as therapeutic agents for the management of diabetes and the treatment of acromegaly. Thus, Z-Lys(BOC)-Gly-Phe-Phe-OMe (Z = PhCH<sub>2</sub>O<sub>2</sub>C, BOC = Me<sub>3</sub>CO<sub>2</sub>C) was Z-deblocked and acylated with Ph<sub>3</sub>CSCH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>H by dicyclohexylcarbodiimide/1-hydroxybenzotriazole to give Ph<sub>3</sub>CSCH<sub>2</sub>CH<sub>2</sub>CO-Lys(BOC)-Gly-Phe-Phe-OMe, which was converted to its hydrazide and coupled to H-Trp-Lys(BOC)-Thr(CMe<sub>3</sub>)-Phe-Thr(CMe<sub>3</sub>)-Ser(CMe<sub>3</sub>)-NHCH<sub>2</sub>CH<sub>2</sub>SCPh<sub>3</sub> by the azide method to give Ph<sub>3</sub>CSCH<sub>2</sub>CH<sub>2</sub>CO-Lys(BOC)-Gly-Phe-Phe-Trp-Lys(BOC)-Thr(CMe<sub>3</sub>)-Phe-Thr(CMe<sub>3</sub>)-Ser(CMe<sub>3</sub>)-NHCH<sub>2</sub>CH<sub>2</sub>SCPh<sub>3</sub> (II). II was treated with iodine/MeOH to give cyclic disulfide III, which was deblocked with HCl to give I (X = Lys-Gly). The in vivo activities of I on GH release in rats are similar to that of somatostatin.

IT 69404-85-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(prepn. and-deblocking of)

IT 69404-86-0P 69404-87-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

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=&gt; fil reg

FILE 'REGISTRY' ENTERED AT 15:34:24 ON 21 JUL 2003  
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STRUCTURE FILE UPDATES: 20 JUL 2003 HIGHEST RN 551897-78-0  
 DICTIONARY FILE UPDATES: 20 JUL 2003 HIGHEST RN 551897-78-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when  
 conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP  
 PROPERTIES for more information. See STNnote 27, Searching Properties  
 in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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=&gt; d sqide l45 1-8

L45 ANSWER 1 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 425428-86-0 REGISTRY  
 CN **Glycinamide, 3-(2-naphthalenyl)-D-alanyl-N-(2-mercaptoethyl)glycyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (2.fwdarw.9)-disulfide (9CI)** (CA INDEX NAME)  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 9  
 NTE modified (modifications unspecified)

type	location	description
bridge	Gly-2 - Gly-9	covalent bridge
stereo	Ala-1 -	D
stereo	Trp-5 -	D

SEQ 1 AGFWWKTFG

HITS AT: 2-8

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

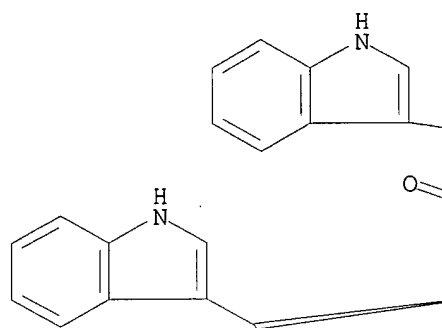
MF C71 H83 N13 O10 S2

SR CA

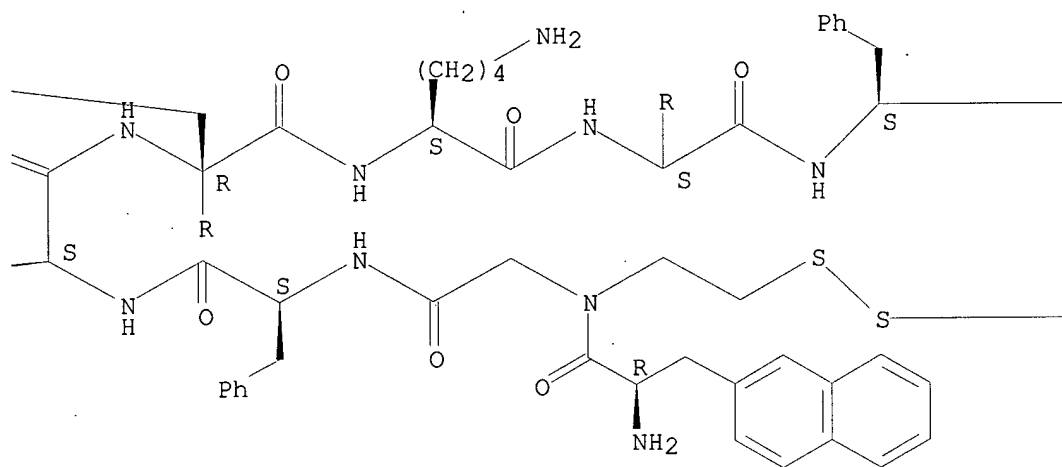
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

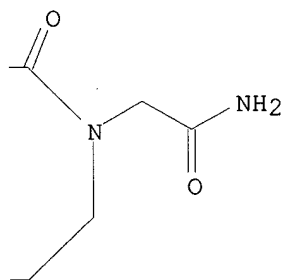
PAGE 1-A



PAGE 1-B



PAGE 1-C



PAGE 2-A



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

L45 ANSWER 2 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN

RN 252845-48-0 REGISTRY

CN Glycinamide, 3-(1-naphthalenyl)-D-alanyl-N-(2-mercaptoethyl)glycyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (2.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3221

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 9

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge	Gly-2	-	Gly-9	covalent bridge
stereo	Ala-1	-		D
stereo	Trp-5	-		D

SEQ 1 AGFWWKTFG

HITS AT: 2-8

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

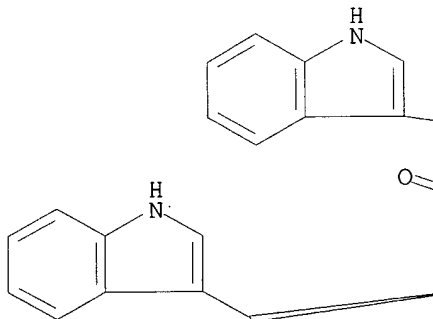
MF C71 H83 N13 O10 S2

SR CA

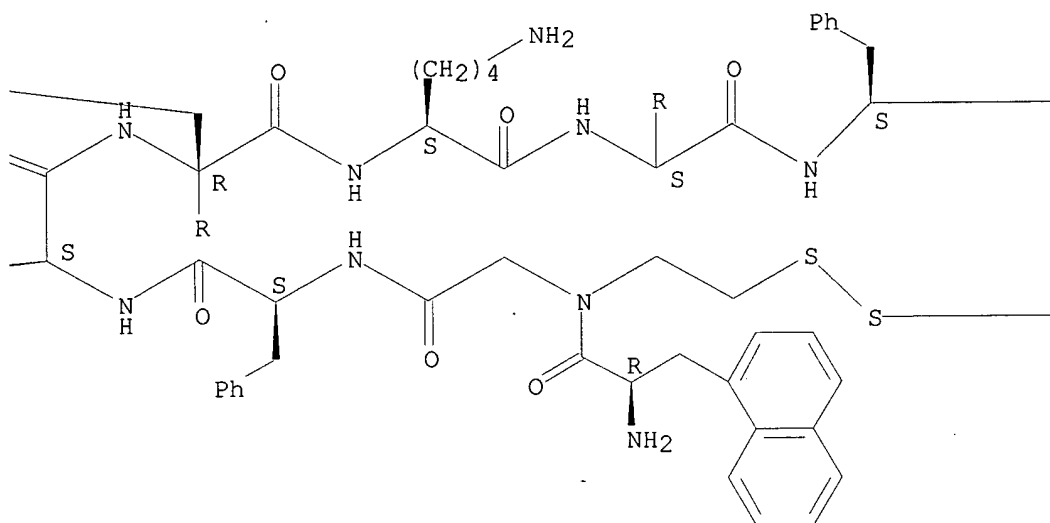
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

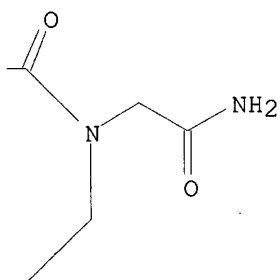
PAGE 1-A



PAGE 1-B



PAGE 1-C



PAGE 2-A



3 REFERENCES IN FILE CA (1947 TO DATE)  
3 REFERENCES IN FILE CAPLUS (1947 TO DATE)

L45 ANSWER 3 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 252845-47-9 REGISTRY  
CN **Glycinamide, D-phenylalanyl-N-(2-mercaptoethyl)glycyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (2.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)**  
OTHER NAMES:  
CN PTR 3219  
FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 9

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge		Gly-2	- Gly-9	covalent bridge
stereo		Phe-1	-	D
stereo		Trp-5	-	D

SEQ 1 FGFWWKTFG

HITS AT: 2-8

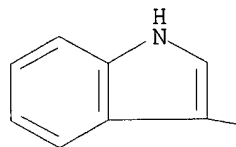
MF C67 H81 N13 O10 S2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

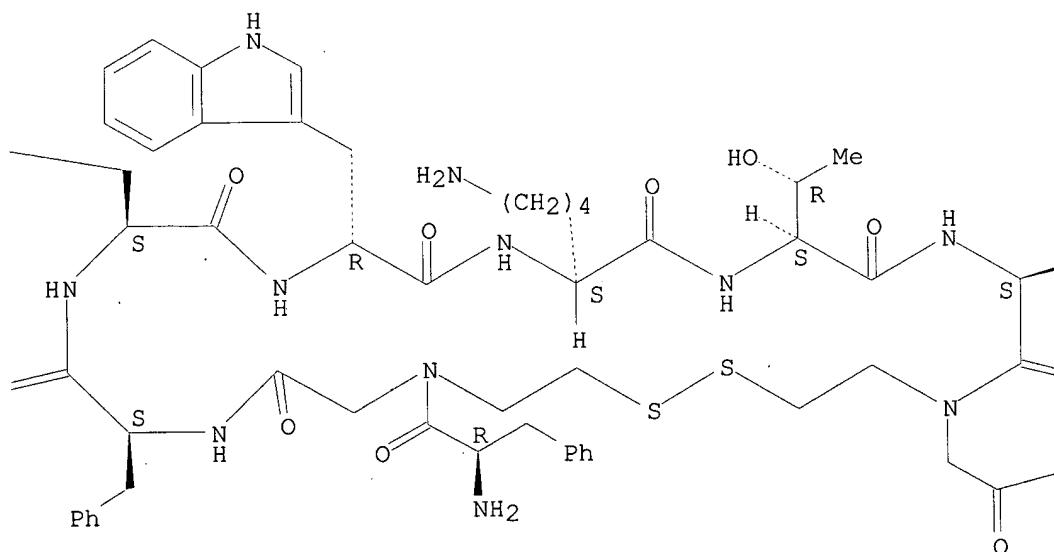
Absolute stereochemistry.

PAGE 1-A

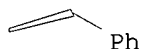


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PAGE 1-B



PAGE 1-C



4 REFERENCES IN FILE CA (1947 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1947 TO DATE)

L45 ANSWER 4 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN

RN 252845-45-7 REGISTRY

CN Glycinamide, N-(2-mercaptoethyl)glycyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (1.fwdarw.8)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3213

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

NTE modified (modifications unspecified)

type	----- location -----		description
bridge	Gly-1	- Gly-8	covalent bridge
stereo	Trp-4	-	D

SEQ 1 GFWWKTFG

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HITS AT: 1-7

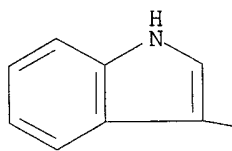
MF C58 H72 N12 O9 S2

SR CA

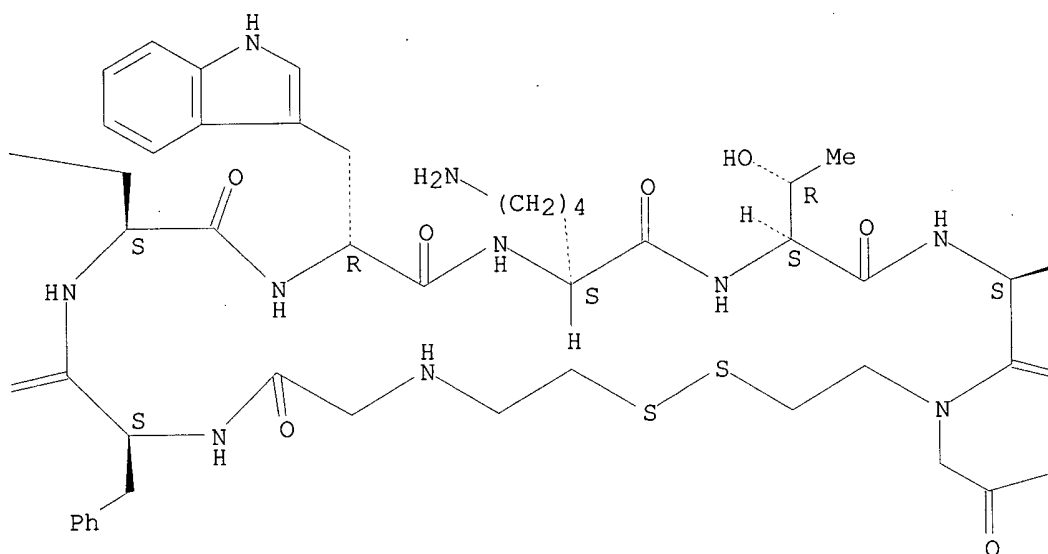
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

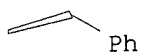
PAGE 1-A



PAGE 1-B







4 REFERENCES IN FILE CA (1947 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1947 TO DATE)

L45 ANSWER 5 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 72127-62-9 REGISTRY

CN Cyclo(glycyl-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,4,7,10,13,16,19-Heptaazacycloheneicosane, cyclic peptide deriv.

CN Cyclic(glycyl-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl)

OTHER NAMES:

CN 84: PN: US20020042374 PAGE: 10 claimed protein

CN 88: PN: US6268342 SEQID: 94 claimed protein

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 7

NTE cyclic

PATENT ANNOTATIONS (PNTE):

Sequence | Patent

Source | Reference

=====+=====

Not Given	US2002042374
	claimed PAGE
	10

-----+-----

	US6268342
	claimed
	SEQID 94

SEQ 1 GFFWKTF

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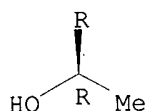
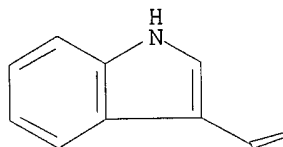
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MF C50 H59 N9 O8

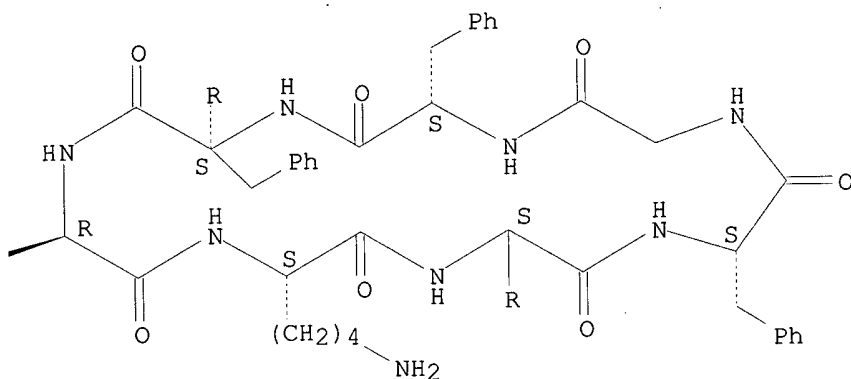
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



8 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

8 REFERENCES IN FILE CAPLUS (1947 TO DATE)

L45 ANSWER 6 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN

RN 69404-87-1 REGISTRY

CN L-Serinamide, N2-(3-mercapto-1-oxopropyl)-L-lysylglycyl-L-phenylalanyl-L-phenylalanyl-L-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-L-threonyl-N-(2-mercaptoethyl)-, cyclic (1.fwdarw.10)-disulfide, acetate (salt) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2-Dithia-5,8,11,14,17,20,23,26,29,32,35-undecaazacyclooctatriacontane, cyclic peptide deriv.

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 10

NTE cyclic

modified (modifications unspecified)

0 > 415, 26

non-cycl.

AA4

type	location	description
uncommon	Oaa-10	-

SEQ 1 GFFWKTFSTX 10

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

MF C68 H92 N14 O14 S2 . x C2 H4 O2

LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL

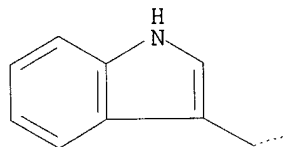
CM 1

CRN 69404-86-0

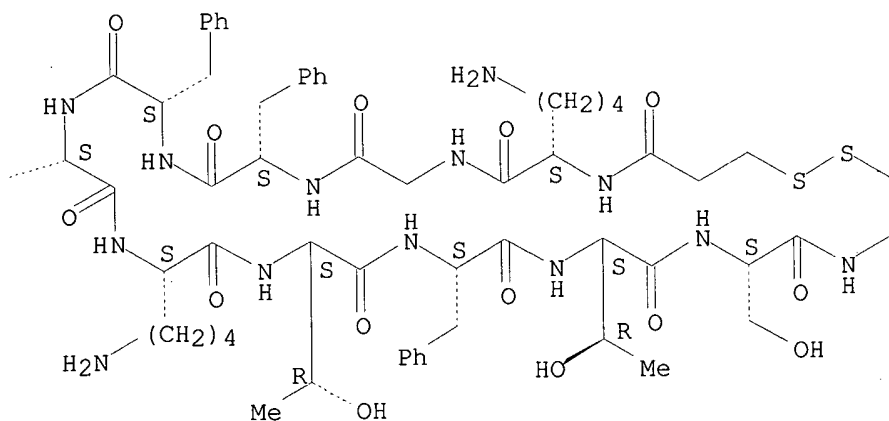
CMF C68 H92 N14 O14 S2

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

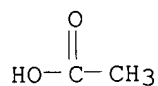


*disulfide*

CM 2

CRN 64-19-7

CMF C2 H4 O2



1 REFERENCES IN FILE CA (1947 TO DATE)

## 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

L45 ANSWER 7 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 69404-86-0 REGISTRY  
 CN L-Serinamide, N2-(3-mercapto-1-oxopropyl)-L-lysylglycyl-L-phenylalanyl-L-phenylalanyl-L-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-L-threonyl-N-(2-mercaptoethyl)-, cyclic (1.fwdarw.10)-disulfide (9CI)  
 (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 1,2-Dithia-5,8,11,14,17,20,23,26,29,32,35-undecaazacyclooctatriacontane, cyclic peptide deriv.  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 10  
 NTE cyclic

type	----- location -----	description
uncommon	Oaa-10 - -	

SEQ 1 GFFWKTFTSX  
 =====

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

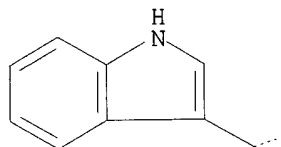
MF C68 H92 N14 O14 S2

CI COM

LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL

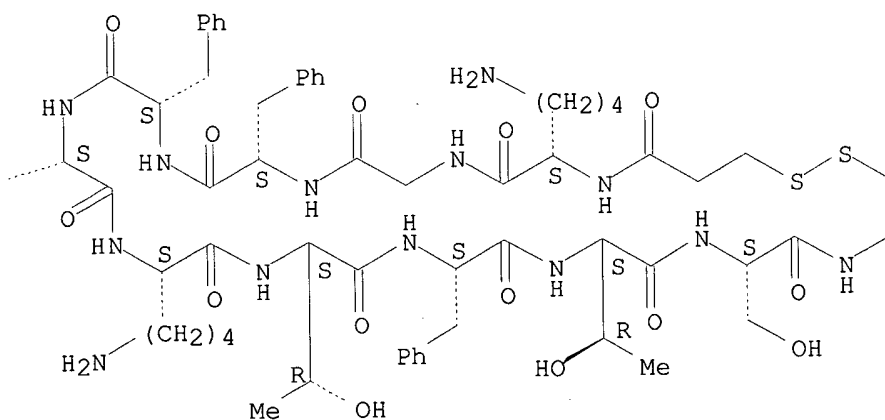
Absolute stereochemistry.

PAGE 1-A



> 4, 5, or 6  
 non-cycl. AA

PAGE 1-B



1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

L45 ANSWER 8 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN

RN 69404-85-9 REGISTRY

CN L-Serinamide, N6-[(1,1-dimethylethoxy) carbonyl]-N2-(3-mercapto-1-oxopropyl)-L-lysylglycyl-L-phenylalanyl-L-phenylalanyl-L-tryptophyl-N6-[(1,1-dimethylethoxy) carbonyl]-L-lysyl-O-(1,1-dimethylethyl)-L-threonyl-L-phenylalanyl-O-(1,1-dimethylethyl)-L-threonyl-O-(1,1-dimethylethyl)-N-(2-mercaptoethyl)-, cyclic (1.fwdarw.10)-disulfide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2-Dithia-5,8,11,14,17,20,23,26,29,32,35-undecaazacyclooctatriacontane, cyclic peptide deriv.

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 10

NTE cyclic

modified (modifications unspecified)

type	location	description
uncommon	Oaa-10	-

SEQ 1 GFFWKTFTSX

=====

HITS AT: 1-7

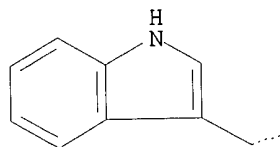
\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

MF C90 H132 N14 O18 S2

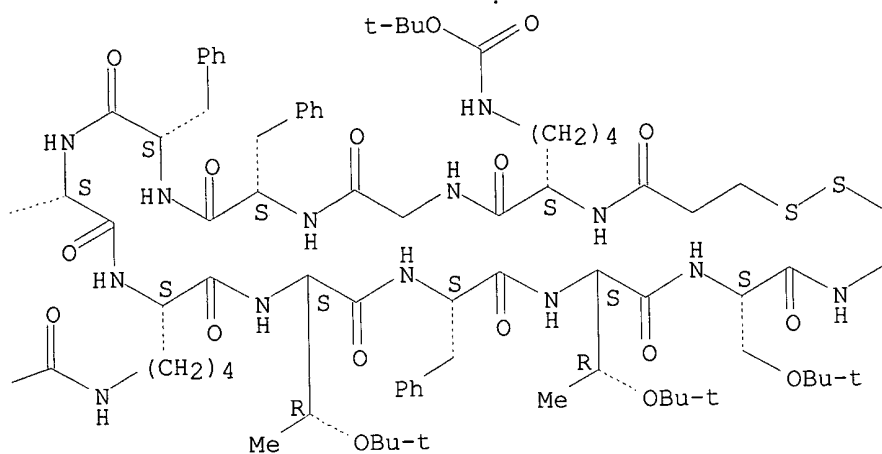
LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL

Absolute stereochemistry.

PAGE 1-A



t-BuO



1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

=> fil hcaplus  
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FILE COVERS 1907 - 21 Jul 2003 VOL 139 ISS 4  
 FILE LAST UPDATED: 20 Jul 2003 (20030720/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> d stat que 154  
 L5 5224 SEA FILE=REGISTRY ABB=ON PLU=ON SOMATO?  
 L44 126 SEA FILE=REGISTRY ABB=ON PLU=ON [G'BAL''DAB''ACA'] [FY].WK[TG'  
 ABU'SCVAF] [FA'NLE'C]/SQSP  
 L45 8 SEA FILE=REGISTRY ABB=ON PLU=ON L44 AND CYCL?  
 L46 13 SEA FILE=HCAPLUS ABB=ON PLU=ON L45  
 L48 3119 SEA FILE=REGISTRY ABB=ON PLU=ON [FY].WK[TG'ABU'SCVAF] [FA'NLE'  
 C]. /SQSP  
 L49 5 SEA FILE=REGISTRY ABB=ON PLU=ON L48 AND (AMINOPENT? OR  
 PENTAN? OR VALERIC OR DAVA)  
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 OR BUTAN? OR BUTYRI? OR CARBOXYPROPYL? OR AMINALON OR BABALLON  
 OR GAMAREX OR GAMMALON? OR GAMMAR OR GAMMASOL OR MIELOGEN OR  
 MIELOMADE OR PIPERIDI?)  
 L51 3 SEA FILE=REGISTRY ABB=ON PLU=ON L50 AND L5  
 L52 8 SEA FILE=REGISTRY ABB=ON PLU=ON L51 OR L49  
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 L54 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L53 NOT L46

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=> d ibib abs hitrn 154 1-5

L54 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 2002:615640 HCAPLUS  
 DOCUMENT NUMBER: 137:165559  
 TITLE: Backbone cyclized radiolabelled somatostatin analogs  
 INVENTOR(S): Bonasera, Thomas A.; Livnah, Nurit; Yechezkel, Tamar;  
 Salitra, Yoseph  
 PATENT ASSIGNEE(S): Peptor Ltd., Israel  
 SOURCE: PCT Int. Appl., 104 pp.  
 CODEN: PIXXD2

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002062819	A2	20020815	WO 2002-IL91	20020204
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: IL 2001-141276 A 20010205

OTHER SOURCE(S): MARPAT 137:165559

AB Novel radiodiagnostic and radiotherapeutic peptides which are conformationally constrained backbone cyclized somatostatin analogs, having improved somatostatin receptor subtype affinity and selectivity are disclosed. The backbone cyclized peptide analogs disclosed posses unique and superior properties over other analogs, such as chem. and metabolic stability, selectivity, increased bioavailability and improved pharmacokinetics. Furthermore, the unique patterns of receptor subtype selectivity provide compds. having improved diagnostic and therapeutic utilities. Pharmaceutical compns. comprising the backbone cyclized somatostatin analogs and radiolabeled analogs, reagents for synthesizing same, and methods of using such compns. for radiodiagnostic and radiotherapeutic purposes are also disclosed.

IT 446311-68-8P 446311-74-6P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (backbone cyclized radiolabeled somatostatin analogs as potential imaging and therapeutic agents)

L54 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:446946 HCAPLUS

DOCUMENT NUMBER: 129:203232

TITLE: Novel Solid-Phase Reagents for Facile Formation of Intramolecular Disulfide Bridges in Peptides under Mild Conditions

AUTHOR(S): Annis, Ioana; Chen, Lin; Barany, George

CORPORATE SOURCE: Department of Chemistry, University of Minnesota, Minneapolis, MN, 55455, USA

SOURCE: Journal of the American Chemical Society (1998), 120(29), 7226-7238

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The controlled formation of intramol. disulfide bridges in peptides, while avoiding unwanted oligomerization, is a significant challenge. Ellman's reagent, 5,5'-dithiobis(2-nitrobenzoic acid), was developed originally in the context of an assay for measuring free thiol concn. under physiol. conditions. The present studies demonstrate that this reagent, when bound through two sites to a suitable solid support (PEG-PS, modified Sephadex, or controlled-pore glass), is an effective mild oxidizing reagent that promotes the formation of disulfide bridges. Rates and yields of the reactions were detd. as a function of pH, excess of oxidizing reagent, resin loading, and parent support, for the prepn. of oxytocin and



deamino-oxytocin (9 residues, disulfide bridge between residues 1 and 6),  
 somatostatin (14 residues, disulfide bridge between residues 3 and 14),  
 .alpha.-conotoxin SI (13 residues, disulfide bridges between residues 2  
 and 7; 3 and 13), and apamin (18 residues, disulfide bridges between  
 residues 1 and 11; 3 and 15). Cystine dimers of these peptide models  
 formed, if at all, in relatively low amts. Use of solid-phase Ellman's  
 reagents to oxidize the linear precursors of conotoxin or apamin  
 (tetrathiols) gave as the main products the correctly paired regioisomers.  
 Particular advantages of the overall approach include fast reaction rates  
 over a wide range of pH from 2.7 to 6.6, easy purifn. of disulfide-contg.  
 products, and the specificity and reusability of the reagents.

> 8-6  
 unbranded

IT 212136-51-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (solid-phase reagents for facile formation of intramol. disulfide  
 bridges in peptides)

REFERENCE COUNT: 77 THERE ARE 77 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L54 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1994:293143 HCAPLUS

DOCUMENT NUMBER: 120:293143

TITLE: Radioactively-labeled somatostatin-derived peptides  
 for imaging and therapeutic uses

INVENTOR(S): Dean, Richard T.; Lister-James, John

PATENT ASSIGNEE(S): Diatech, Inc., USA

SOURCE: PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 44

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9400489	A2	19940106	WO 1993-US6029	19930623
WO 9400489	A3	19940331		
W: AU, CA, JP, KR, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5716596	A	19980210	US 1992-902935	19920623
AU 9347688	A1	19940124	AU 1993-47688	19930623
AU 690071	B2	19980423		
EP 649434	A1	19950426	EP 1993-918129	19930623
EP 649434	B1	20010801		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
JP 08503924	T2	19960430	JP 1994-502568	19930623
EP 1094074	A2	20010425	EP 2000-122243	19930623
EP 1094074	A3	20020109		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
AT 203754	E	20010815	AT 1993-918129	19930623
ES 2164667	T3	20020301	ES 1993-918129	19930623
CA 2138647	C	20021112	CA 1993-2138647	19930623
ZA 9307596	A	19940804	ZA 1993-7596	19931013
AU 9470990	A1	19950117	AU 1994-70990	19940603
AU 701083	B2	19990121		
EP 720621	A1	19960710	EP 1994-920076	19940603
EP 720621	B1	20010207		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, SE				
AT 199089	E	20010215	AT 1994-920076	19940603
EP 1092726	A2	20010418	EP 2000-122241	19940603
EP 1092726	A3	20020109		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, IE				
EP 1099707	A2	20010516	EP 2000-122242	19940603
EP 1099707	A3	20020109		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, IE

ES 2158897	T3	20010916	ES 1994-920076	19940603
ZA 9404498	A	19960624	ZA 1994-4498	19940623
US 5871711	A	19990216	US 1995-347397	19950113
US 5814298	A	19980929	US 1995-465764	19950606
US 5820845	A	19981013	US 1995-466100	19950606
US 5833942	A	19981110	US 1995-470932	19950606
US 5843401	A	19981201	US 1995-467025	19950606
AU 9877481	A1	19981001	AU 1998-77481	19980723

## PRIORITY APPLN. INFO.:

US 1992-902935	A2	19920623
EP 1993-918129	A3	19930623
WO 1993-US6029	A	19930623
US 1993-92355	A	19930715
EP 1994-920076	A	19940603
WO 1994-US6274	W	19940603

## OTHER SOURCE(S):

MARPAT 120:293143

AB Peptide derivs. and analogs of somatostatin, and embodiments of such peptides labeled with <sup>99m</sup>Tc, <sup>186</sup>Re, or <sup>188</sup>Re are presented, as well as methods and kits for making, radiolabeling and using such peptides for imaging or therapy in a mammalian body. CH<sub>2</sub>CO-FFWDKTFCCAGCAGamide (I) was prepd. by solid phase peptide synthesis and radiolabeled with <sup>99m</sup>Tc. I inhibited binding of [<sup>125</sup>I-Tyr<sup>11</sup>]somatostatin-14 to AR42J rat pancreatic tumor cell membrane somatostatin receptors with a K<sub>i</sub> = 0.16 nM.

IT 154887-73-7DP, Tc-99 labeled

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

IT 154887-73-7P 154935-66-7DP, Tc-99 labeled  
154935-66-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as somatostatin analog, for radiolabeling for scintigraphic imaging and therapy)

L54 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1985:160548 HCAPLUS

DOCUMENT NUMBER: 102:160548

TITLE: Partial retro-inverso analogs of somatostatin:  
pairwise modifications at residues 7 and 8 and at  
residues 8 and 9

AUTHOR(S): Pallai, P. V.; Struthers, R. S.; Goodman, Murray;  
Moroder, L.; Wunsch, E.

CORPORATE SOURCE: Dep. Chem., Univ. California, La Jolla, CA, 92093, USA  
SOURCE: Biochemistry (1985), 24(8), 1933-41  
CODEN: BICHAW; ISSN: 0006-2960

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Peptide bonds between residues 7 and 8 and residues 8 and 9, postulated internal cleavage sites of the peptide hormone somatostatin, were subjected to pairwise retro-inverso modification, where atoms of these peptide bonds were interchanged to give the analogs [gPhe<sup>7</sup>-m-(RS)-Trp<sup>8</sup>]somatostatin (I) and [gTrp<sup>8</sup>-m-(RS)-Lys<sup>9</sup>]somatostatin (II). Key fragments contg. the modifications were synthesized by using [bis(trifluoroacetoxy)iodo]benzene [2712-78-9] for the generation of gem-diaminoalkyl-contg. precursors from peptide amides. The versatility of soln. synthetic methods was utilized to allow the incorporation of the modified segments. Protecting groups, removable selectively and under mild conditions, included tert-butyl-based groups for the side chains and tert-butylmercapto group for the cysteine thiols. The excellent results obtained in the syntheses of I and II suggest the general feasibility of this route for the synthesis of centrally modified analogs. The purifn. of the products by Sephadex LH-20 chromatog. afforded the sepn. of diastereomers of both analogs. The two isomers of I showed significant but different activities whereas those of II were marginally active.

IT 95388-77-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(prepn. and cyclization of)

L54 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1980:639948 HCAPLUS  
DOCUMENT NUMBER: 93:239948  
TITLE: Somatostatin analogs  
INVENTOR(S): Sarantakis, Dimitrios  
PATENT ASSIGNEE(S): American Home Products Corp., USA  
SOURCE: U.S., 5 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

- From 1<sup>st</sup> search

Diff. from this search

Not as strong - go w'

8/8 of  
1<sup>st</sup> search

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4215039	A	19800729	US 1979-12430	19790215
PRIORITY APPLN. INFO.:			US 1979-12430	19790215

GI For diagram(s), see printed CA Issue.

AB Somatostatin analogs I [R = H, alkanoyl, Bz, H-Ala-Gly, H-Ala-D-Ala, H-Gly-Gly-Gly; X = Arg, His, Lys; X1 = His, Tyr, Glu; X2 = Trp, D-Trp; X3 = Val, HNCHEtCO (Abu), Leu, Phe, Tyr; R1 = H, CO2H; the configuration at CHR1 can be D or L] and their deamino analogs were prep'd. as agents for suppressing release of growth hormone (GH) and glucagon without substantially decreasing insulin. Thus, Me3CO2C-Cys(MBzl)-Arg(Tos)-His(Tos)-Phe-Phe-D-Trp-Lys(CO2CH2C6H4Cl-2)-Val-Phe-Thr(CH2Ph)-Ser(CH2Ph)-Cys(MBzl)-OCH2-resin (MBzl = CH2C6H4OMe-p, Tos = tosyl) was prep'd. by the solid-phase method and then it was resin-cleaved and deblocked by HF/anisole to give the linear peptide, which was cyclized by oxidation with K3Fe(CN)6 to give somatostatin II (X4 = His, X5 = Val) (III). II (X4 = Glu, X5 = Abu) was also prep'd. by the solid-phase method. III at 200 .mu.g/mL (i.p.) lowered the blood levels of GH and glucagon in rats from 407 ng/mL and 45 pg/mL, resp., to 119 ng/mL and 22 pg/mL, resp., whereas the above dose of III lowered blood levels of insulin in rats from 271 .mu.g/mL to 191 .mu.g/mL.

Band between?

IT 75691-47-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and inhibition of release of growth hormone and glucagon by)

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STRUCTURE FILE UPDATES: 20 JUL 2003 HIGHEST RN 551897-78-0  
DICTIONARY FILE UPDATES: 20 JUL 2003 HIGHEST RN 551897-78-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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L52 ANSWER 1 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 446311-74-6 REGISTRY  
 CN Rhenate(1-), [N-[(mercapto-.kappa.S)acetyl]glycyl-.kappa.N-glycyl-.kappa.N-glycyl-.kappa.N-5-aminopentanoyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (12.fwdarw.5)-lactamato(4-)]oxo-, hydrogen, (SP-5-24)- (9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE  
 SQL 12  
 NTE metal complex  
 modified (modifications unspecified)

type	-----	location	-----	description
bridge	Dab-5	-	Gly-12	covalent bridge
uncommon	Oaa-4	-	-	-
uncommon	Dab-5	-	-	-
stereo	Trp-8	-	-	D

SEQ 1 GGGXXFWWKT FG

=====

HITS AT: 6-12

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

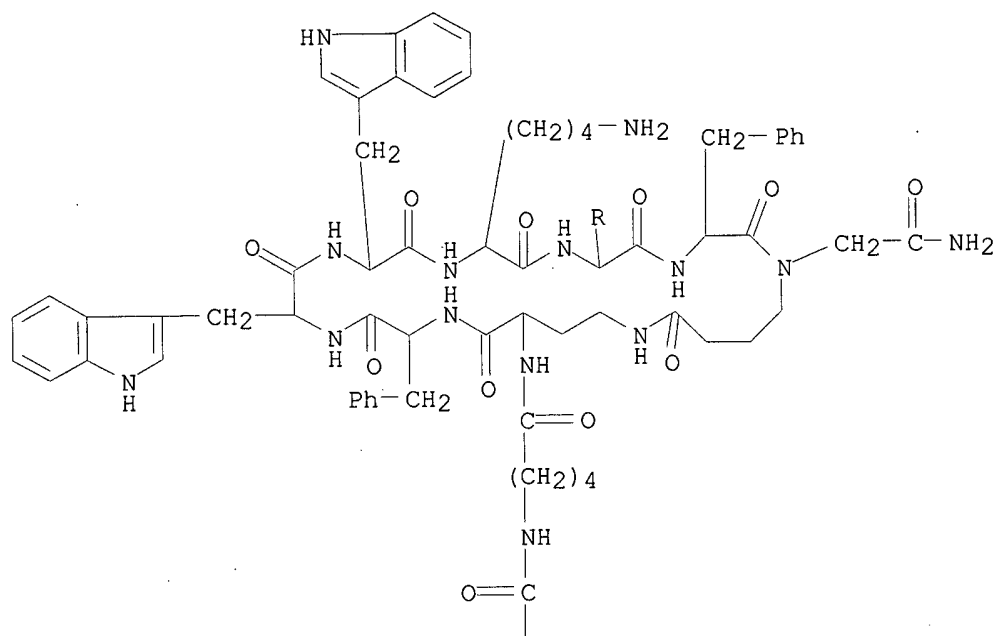
MF C73 H91 N17 O16 Re S . H

CI CCS

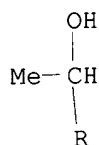
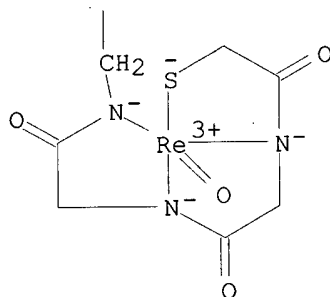
SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

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PAGE 3-A

● H<sup>+</sup>

1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

L52 ANSWER 2 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 446311-68-8 REGISTRY

CN Rhenate(1-), [N-[(mercapto-.kappa.S)acetyl]-3-[[ (mercapto-.kappa.S)acetyl]amino-.kappa.N]alanyl-.kappa.N-5-aminopentanoyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (10.fwdarw.3)-lactamato(4-)]oxo-, hydrogen, (SP-5-35)- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE

SQL 10

NTE metal complex  
modified (modifications unspecified)

type	-----	location	-----	description
bridge	Dab-3	-	Gly-10	covalent bridge
uncommon	Oaa-2	-	-	-
uncommon	Dab-3	-	-	-
stereo	Trp-6	-	-	D

SEQ 1 AXXFWWKTFG

HITS AT: 4-10

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

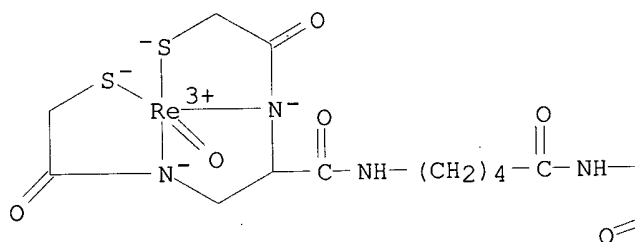
MF C72 H90 N16 O15 Re S2 . H

CI CCS

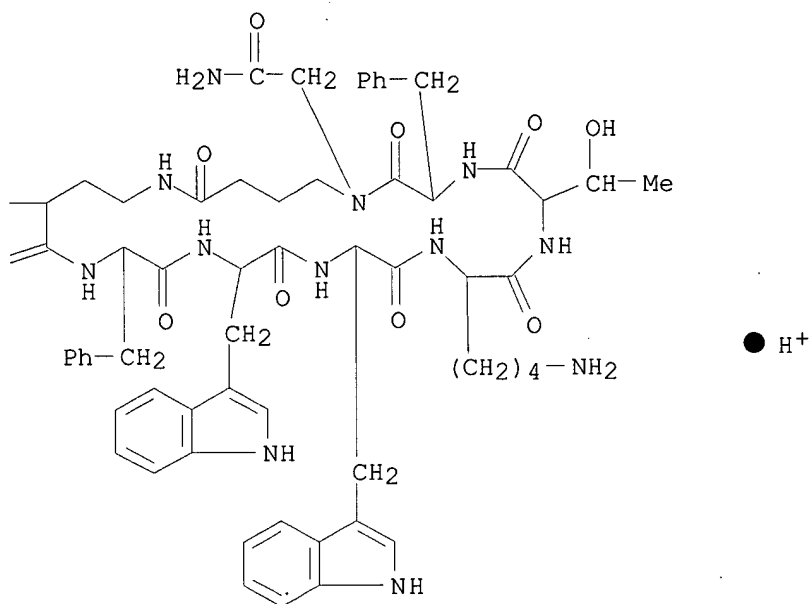
SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

PAGE 1-A



PAGE 1-B



1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

L52 ANSWER 3 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN

RN 212136-51-1 REGISTRY

CN 7-20-Somatostatin-20 (swine reduced), 9-[(2S)-2-aminobutanoic acid]-20-L-alanine- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 14

NTE

type	location	description
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SEQ 1 AGXKNFFWKT FTSA

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HITS AT: 6-12

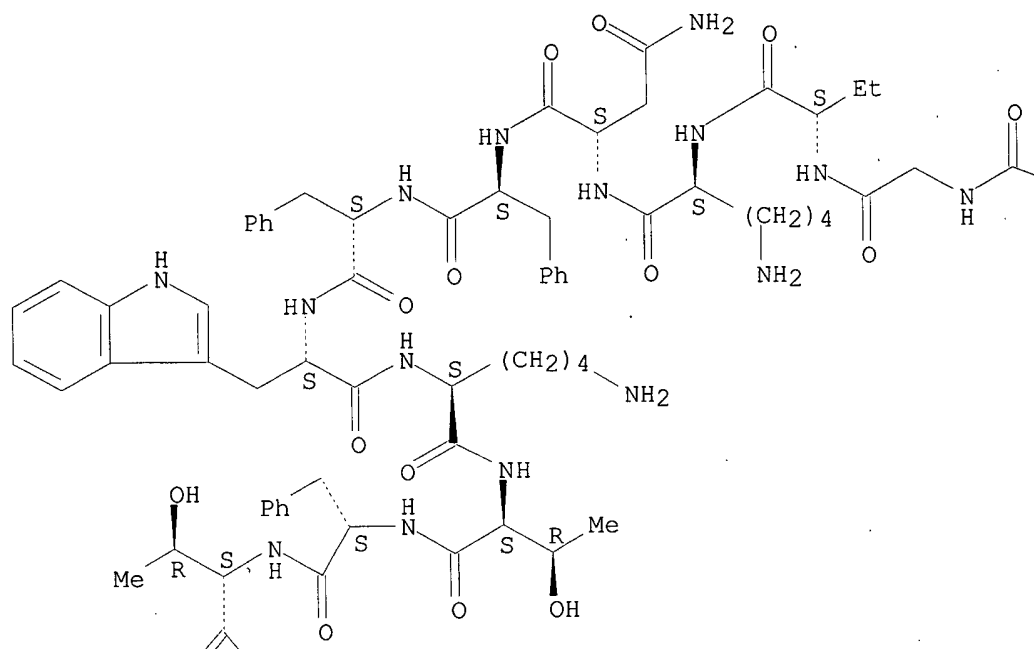
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SR CA

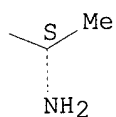
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

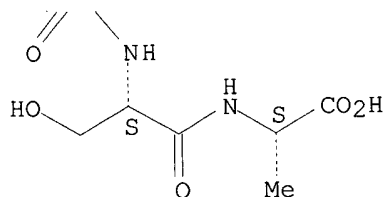
PAGE 1-A



PAGE 1-B



PAGE 2-A



1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

L52 ANSWER 4 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 204388-03-4 REGISTRY  
 CN **Cyclo(L-asparaginyl-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-5-aminopentanoyl) (9CI)** (CA INDEX NAME)



OTHER NAMES:

CN 80: PN: US20020042374 PAGE: 10 claimed protein  
 CN 84: PN: US6268342 SEQID: 90 claimed protein  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 8  
 NTE cyclic

type	location	description
uncommon	Oaa-8	

PATENT ANNOTATIONS (PNTE):

Sequence	Patent
Source	Reference
Not Given	US2002042374
	claimed PAGE
	10
	US6268342
	claimed
	SEQID 90

SEQ 1 NFFWKTFX

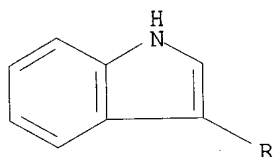
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\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

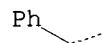
MF C57 H71 N11 O10  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

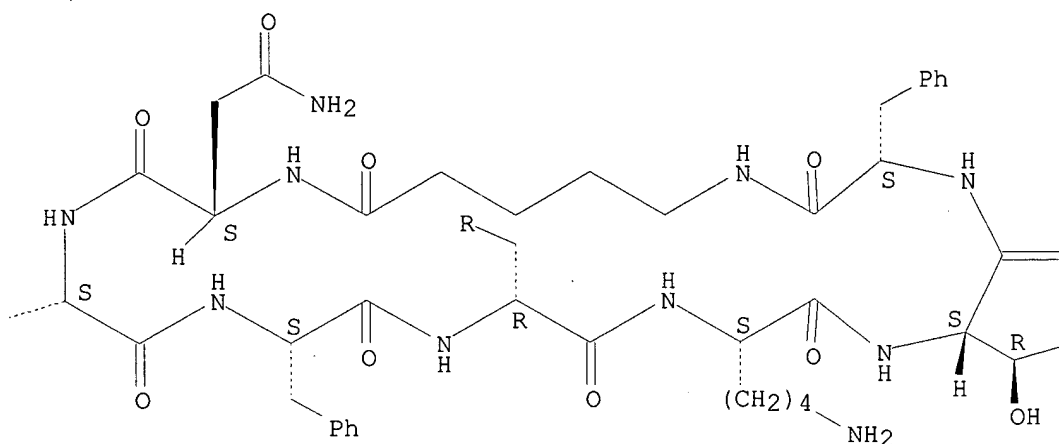
PAGE 1-A



PAGE 2-A



PAGE 2-B



PAGE 2-C

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—Me

7 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 7 REFERENCES IN FILE CAPLUS (1947 TO DATE)

L52 ANSWER 5 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 154935-66-7 REGISTRY  
 CN **L-Cysteinamide, N-(bromoacetyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N-[2-[(5-aminopentyl)(2-mercapto-2-methylpropyl)amino]ethyl]-N-(2-mercapto-2-methylpropyl)-(9CI)** (CA INDEX NAME)  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 7  
 NTE modified (modifications unspecified)

type	location	description
modification	Phe-1	bromoacetyl<Bac>

SEQ 1 FFWKTFC  
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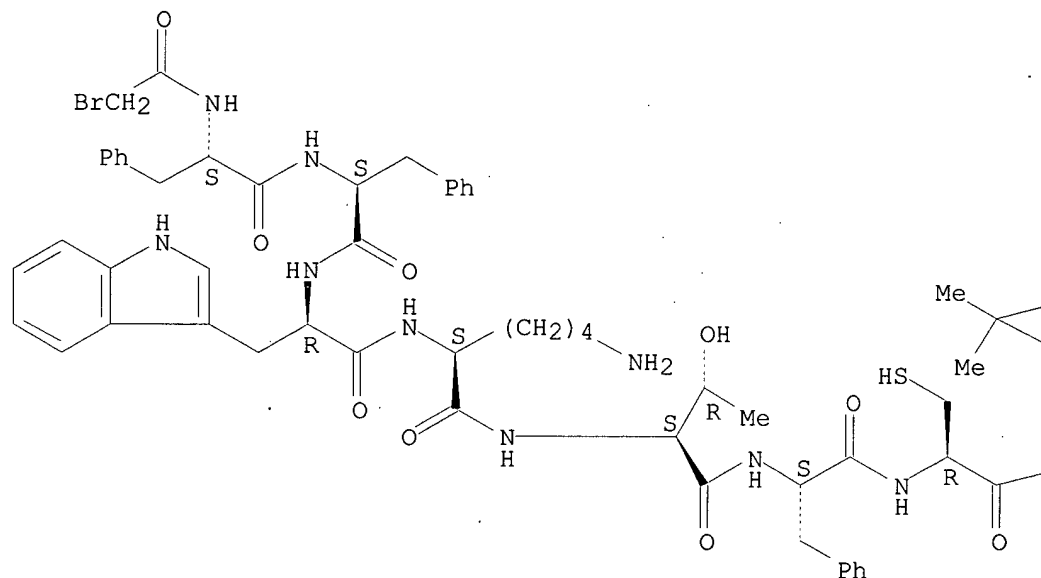
HITS AT: 1-7

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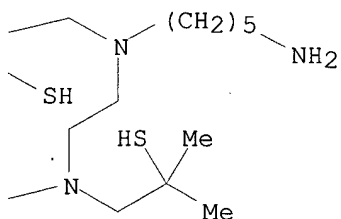
MF C68 H97 Br N12 O9 S3  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

L52 ANSWER 6 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 154887-73-7 REGISTRY  
 CN L-Cysteinamide, N-(chloroacetyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N-[2-[(5-aminopentyl)(2-mercapto-2-methylpropyl)amino]ethyl]-N-(2-mercapto-2-methylpropyl)-

(9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 7

NTE modified (modifications unspecified)

type	location	description
modification	Phe-1	undetermined modification

SEQ 1 FFWKTFC

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

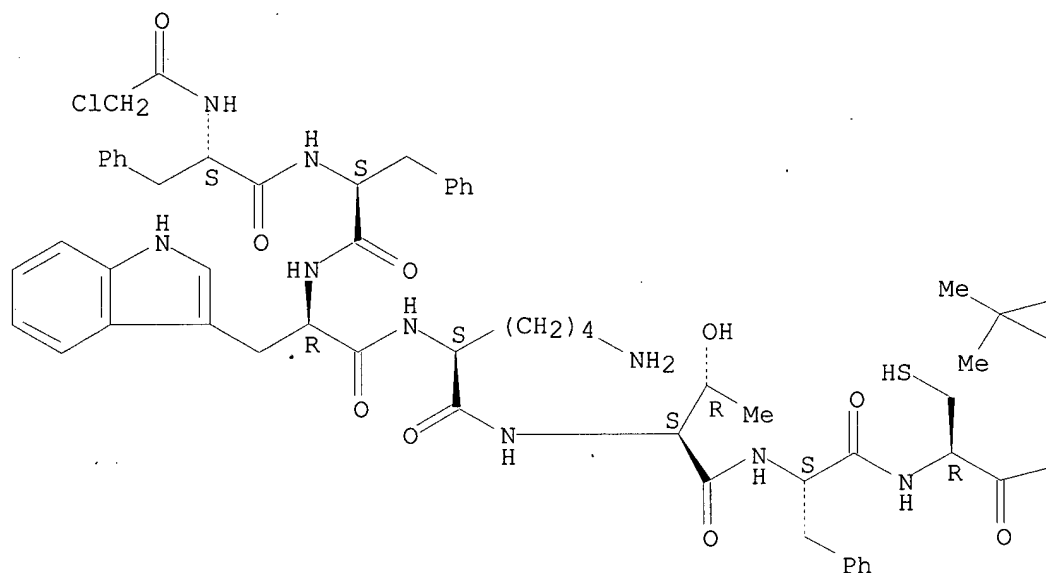
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SR CA

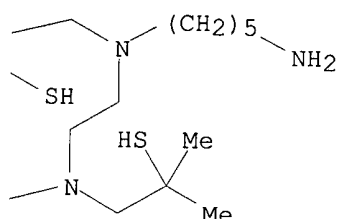
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

L52 ANSWER 7 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN

RN 95388-77-5 REGISTRY

CN **Somatostatin (sheep reduced), 8-de-L-tryptophan-9-[2-(4-aminobutyl)-N-[1-amino-2-(1H-indol-3-yl)ethyl]-3-oxo-.beta.-alanine]-, (S)- (9CI)**  
 (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN **Somatostatin (sheep reduced), 8-de-L-tryptophan-9-[DL-2-(4-aminobutyl)-N-[1-amino-2-(1H-indol-3-yl)ethyl]-3-oxo-.beta.-alanine]-, (S)-**

FS PROTEIN SEQUENCE

SQL 14

NTE

type	location		description
stereo	Lys-9	-	DL
replacement	Trp-8	-	aza
replacement	Lys-9	-	carba

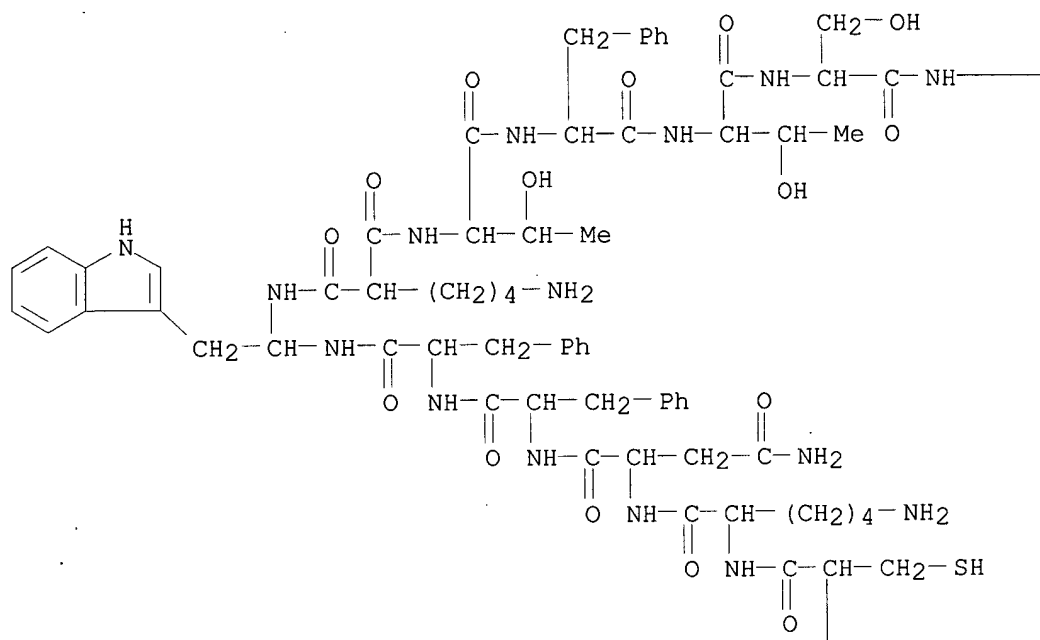
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HITS AT: 6-12

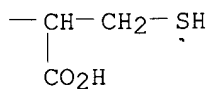
**\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\***

MF C76 H106 N18 O19 S2

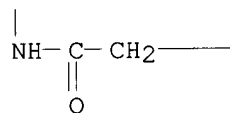
LC STN Files: CA, CAPLUS



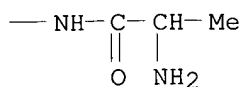
PAGE 1-B



PAGE 2-A



PAGE 2-B



1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

L52 ANSWER 8 OF 8) REGISTRY COPYRIGHT 2003 ACS on STN  
RN 75691-47-3 REGISTRY  
CN **Somatostatin (sheep), 1-de-L-alanine-2-deglycine-4-L-arginine-5-L-**

glutamic acid-8-D-tryptophan-10-(L-2-aminobutanoic acid)- (9CI) (CA  
INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2-Dithia-5,8,11,14,17,20,23,26,29,32,35-undecaazacyclooctatriacontane,  
cyclic peptide deriv.

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 12

NTE

type	-----	location	-----	description
bridge	Cys-1	-	Cys-12	disulfide bridge
uncommon	Abu-8	-	-	-

SEQ 1 CREFFWKXFT SC

=====

HITS AT: 4-10

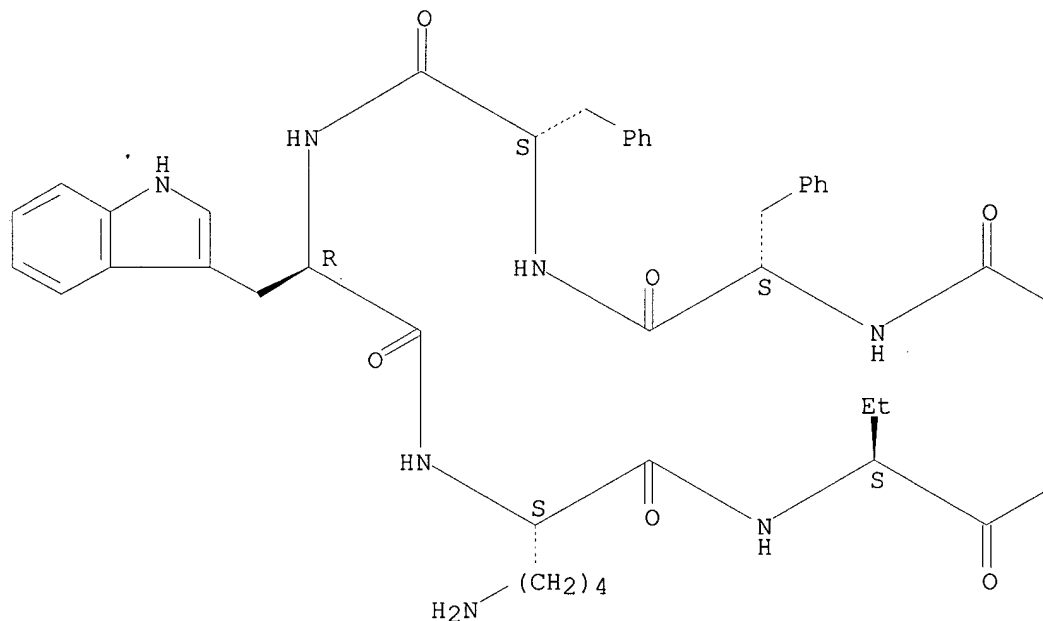
\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

MF C72 H97 N17 O17 S2

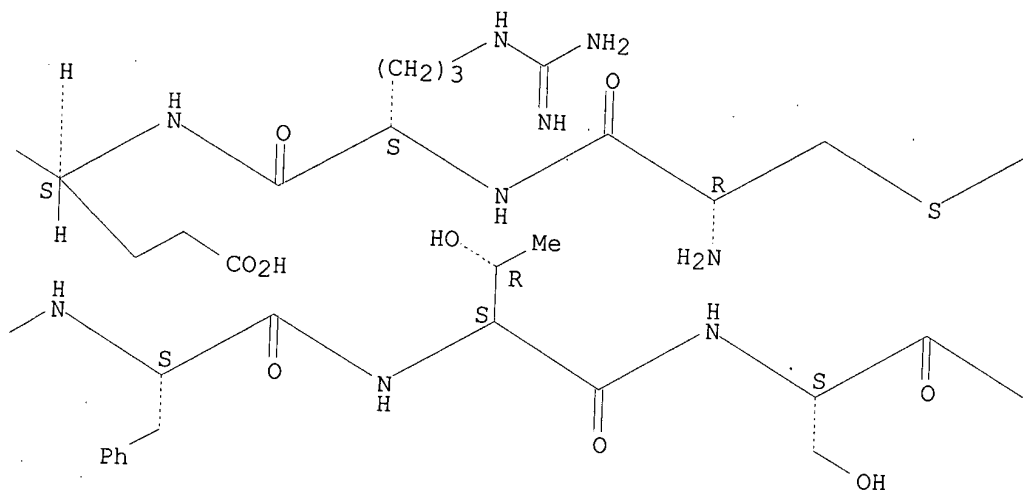
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

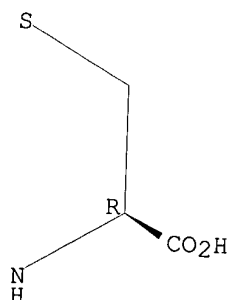
PAGE 1-A



PAGE 1-B



PAGE 1-C



1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)



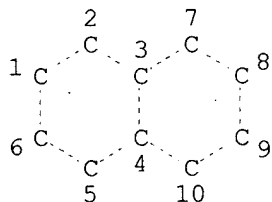
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 FILE 'HCAPLUS' ENTERED AT 14:08:40 ON 21 JUL 2003  
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
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FILE COVERS 1907 - 21 Jul 2003 VOL 139 ISS 4  
 FILE LAST UPDATED: 20 Jul 2003 (20030720/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

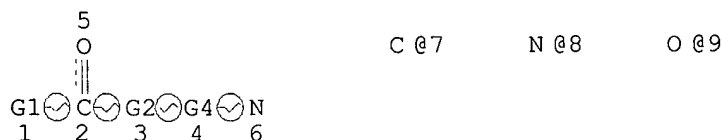
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 =>  
 => d stat que  
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 NLE'C]/SQSP  
 L2 1188667 SEA FILE=REGISTRY ABB=ON PLU=ON [FY]..[TG'ABU'SCVAF][FA'NLE'C  
 ]/SQSP  
 L3 STR



NODE ATTRIBUTES:  
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 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 10

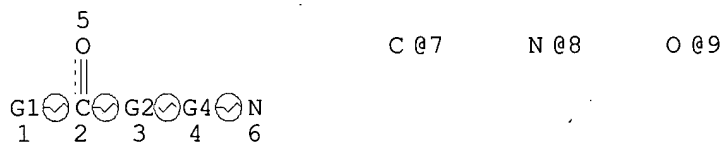
STEREO ATTRIBUTES: NONE  
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 L5 5224 SEA FILE=REGISTRY ABB=ON .PLU=ON SOMATO?  
 L6 817 SEA FILE=REGISTRY ABB=ON PLU=ON (L1 OR L4) AND L5  
 L7 5681 SEA FILE=REGISTRY ABB=ON PLU=ON (L1 OR L2) AND BRIDGE/NTE  
 L8 361 SEA FILE=REGISTRY ABB=ON PLU=ON L6 AND L7  
 L15 STR



VAR G1=7/8/9  
 REP G2=(0-1) N  
 REP G4=(1-5) CH2  
 NODE ATTRIBUTES:  
 NSPEC IS R AT 7  
 NSPEC IS R AT 8  
 NSPEC IS R AT 9  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE  
 L16 10 SEA FILE=REGISTRY SUB=L8 SSS FUL L15  
 L17 STR



VAR G1=7/8/9  
 REP G2=(0-1) S  
 REP G4=(1-5) CH2  
 NODE ATTRIBUTES:  
 NSPEC IS R AT 7  
 NSPEC IS R AT 8  
 NSPEC IS R AT 9  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE  
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 L19 10 SEA FILE=REGISTRY ABB=ON PLU=ON L16 OR L18  
 L20 22 SEA FILE=HCAPLUS ABB=ON PLU=ON L19

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=> d ibib abs hitrn hitseq 1-22

L20 ANSWER 1 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 2002:232937 HCAPLUS  
 DOCUMENT NUMBER: 137:76086  
 TITLE: Identification and characterization of a type  
 five-like somatostatin receptor in goldfish pituitary  
 Lin, Xinwei; Nunn, Caroline; Hoyer, Daniel; Rivier,  
 Jean; Peter, Richard E.  
 CORPORATE SOURCE: Department of Biological Sciences, University of  
 Alberta, Edmonton, AB, T6G 2E9, Can.  
 SOURCE: Molecular and Cellular Endocrinology (2002), 189(1-2),  
 105-116  
 CODEN: MCEND6; ISSN: 0303-7207  
 PUBLISHER: Elsevier Science Ireland Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A somatostatin receptor (Sst) cDNA was cloned and sequenced from goldfish pituitary. The cDNA encodes a 390-amino acid type 5-like Sst (designated as gfSst5). The amino acid sequence of the receptor has slightly higher homol. to mammalian Sst5', compared with other mammalian Sst subtypes and recently identified fish Sst1, Sst2, and Sst3. In CCL39-SRE-Luci cells stably expressing the cloned receptor, agonist radioligand [125I]LTT-SRIF28', a mammalian SRIF28 analog, bound to a homogenous population of receptors with high affinity (nM Kd). Competition binding studies showed that all 3 natural goldfish SRIF ligands, SRIF14, [Pro2]SRIF14, and goldfish SRIF28 (gfSRIF28), and LTT-SRIF28 bind the cloned gfSst5 with high affinity and significantly stimulate [35S]GTP.gamma.S binding, with SRIF28 peptides showing higher affinity in receptor binding and potency in [35S]GTP.gamma.S binding compared with SRIF14 peptides. The receptor gene is highly and predominately expressed in pituitary; lower levels of the receptor mRNA were also detected in different brain regions by reverse transcriptase-polymerase chain reaction (RT-PCR) followed by Southern blot anal.

IT 421545-91-7, Goldfish somatostatin-28

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(identification and characterization of a type five-like somatostatin receptor in goldfish pituitary)

IT 421545-91-7, Goldfish somatostatin-28

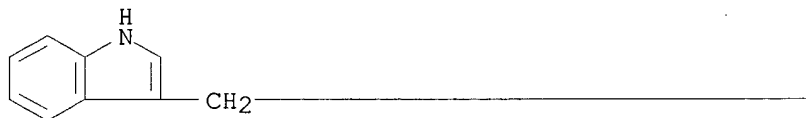
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(identification and characterization of a type five-like somatostatin receptor in goldfish pituitary)

RN 421545-91-7 HCAPLUS

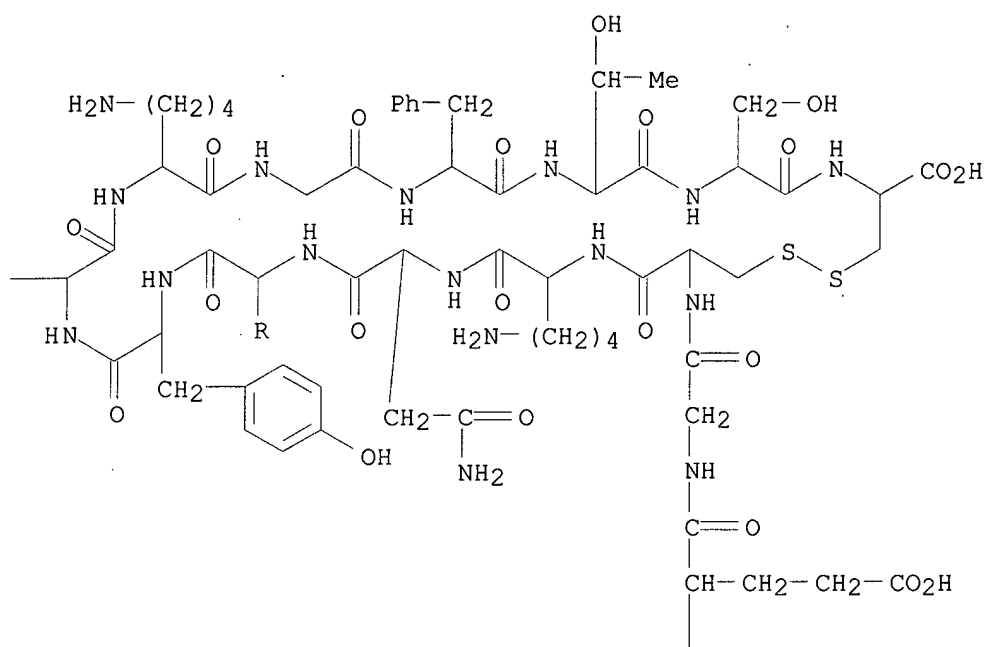
CN L-Cysteine, L-seryl-L-alanyl-L-.alpha.-glutamyl-L-seryl-L-seryl-L-asparaginyl-L-glutaminyl-L-leucyl-L-prolyl-L-threonyl-L-arginyl-L-valyl-L-arginyl-L-lysyl-L-.alpha.-glutamylglycyl-L-cysteinyl-L-lysyl-L-asparaginyl-L-phenylalanyl-L-tyrosyl-L-tryptophyl-L-lysylglycyl-L-phenylalanyl-L-threonyl-L-seryl-, cyclic (17.fwdarw.28)-disulfide (9CI) (CA INDEX NAME)

SEQ 1 SAESSNQLPT RVRKEGCKNF YWKGFTSC

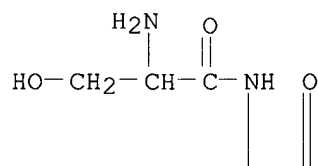
PAGE 1-A



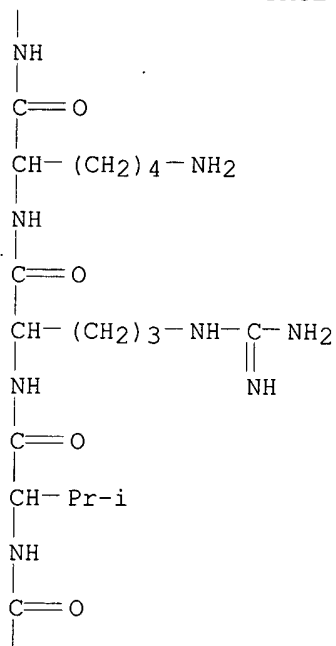
PAGE 1-B



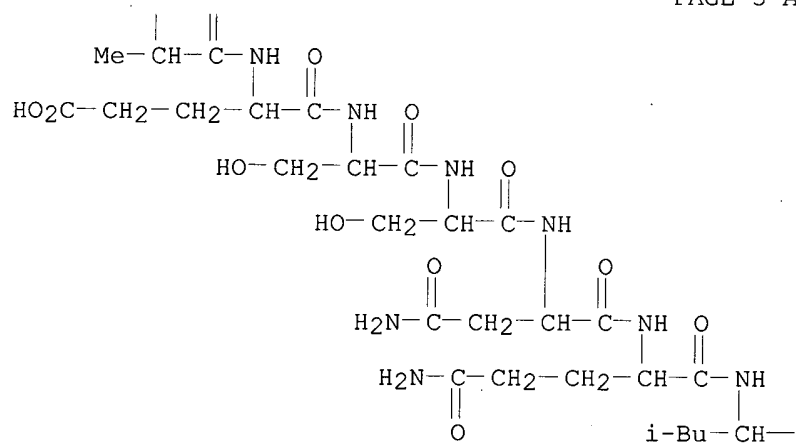
PAGE 2-A



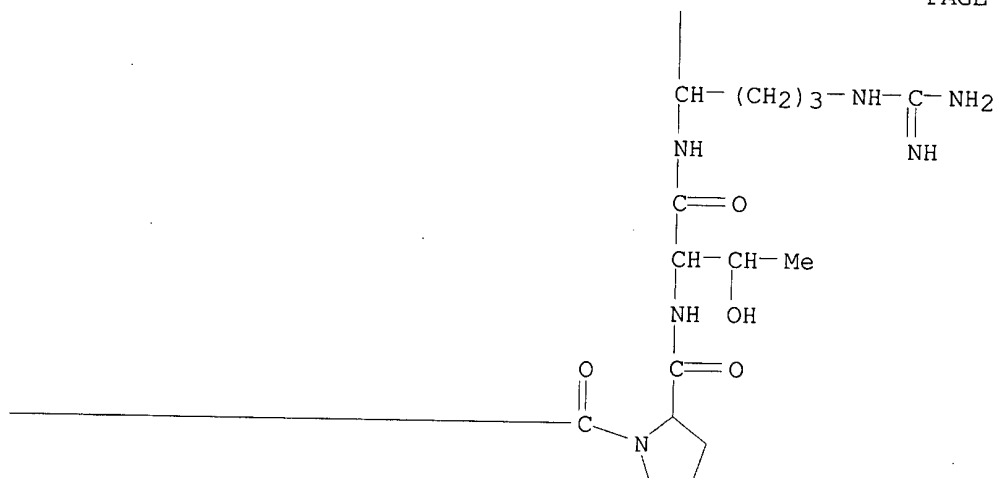
PAGE 2-B



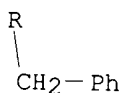
PAGE 3-A



PAGE 3-B



PAGE 4-A



REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 2 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:135340 HCAPLUS

DOCUMENT NUMBER: 136:352826

TITLE: Pharmacological characterization of the goldfish somatostatin sst5 receptor

AUTHOR(S): Nunn, Caroline; Feuerbach, Dominik; Lin, Xinwei; Peter, Richard; Hoyer, Daniel

CORPORATE SOURCE: Novartis Pharma AG, Nervous System Research, Basel, CH-4002, Switz.

SOURCE: European Journal of Pharmacology (2002), 436(3), 173-186

CODEN: EJPHAZ; ISSN: 0014-2999

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Somatostatin (somatotropin release inhibiting factor, SRIF), exerts its effects via specific G protein coupled receptors of which five subtypes have been cloned (sst1-5). Recently, SRIF receptors have also been cloned from fish tissues. In this study, goldfish sst5 receptors (gfsst5) were expressed and characterized in the Chinese hamster lung fibroblast cell line, that harbors the luciferase reporter gene driven by the serum responsive element (CCL39-SRE-Luci). The agonist radioligands [125I]-LTT-SRIF-28 ([Leu8,D-Trp22,125I-Tyr25]SRIF-28) and [125I][Tyr10]cortistatin-14 labeled similar receptor densities with high affinity and in a saturable manner (pKd: 9.99-9.71; Bmax: 300-350 fmol/mg). 5'-Guanylyl-imidodiphosphate inhibited radioligand binding to some degree (38.5-57.9%). In competition binding studies, the pharmacol. profile of SRIF binding sites defined with [125I]LTT-SRIF-28 and [125I][Tyr10]cortistatin-14 correlated significantly (R2 = 0.97).

Pharmacol. profiles of human and mouse sst5 receptors expressed in CCL39 cells correlated markedly less with those of the gfsst5 profile ( $R^2 = 0.52-0.78$ ). Functional expression of the gfsst5 receptor was examd. by measurement of agonist-induced luciferase expression and stimulation of [35S]GTP. $\gamma$ .S binding. Profiles were similar to those achieved in radioligand binding studies ( $R^2 = 0.81-0.93$ ), although relative potency ( $pEC_{50}$ ) was reduced compared to  $pK_d$  values. Relative efficacy profiles of luciferase expression and [35S]GTP. $\gamma$ .S binding, were rather divergent ( $R^2 = 0.48$ ) with peptides showing full agonism at one pathway and absence of agonism at the other. BIM 23056 (D-Phe-Phe-Tyr-D-Trp-Lys-Val-Phe-D-Nal-NH<sub>2</sub>) acted as an antagonist on the effects of SRIF-14 ( $pKB = 6.74$ ) on stimulation of [35S]GTP. $\gamma$ .S binding. Pertussis toxin abolished the effect of SRIF-14 on luciferase expression and [35S]GTP. $\gamma$ .S binding suggesting coupling of the receptor to  $G_i/G_o$  proteins. In summary, the present studies demonstrate that the gfsst5 receptor has a similar pharmacol. profile and transductional properties to mammalian sst5 receptors. The difference in efficacy profiles defined using different functional assays suggests numerous, agonist specific, conformational receptor states, and/or ligand-dependent receptor trafficking.

IT 421545-91-7

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(pharmacol. characterization of goldfish somatostatin sst5 receptor)

IT 421545-91-7

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(pharmacol. characterization of goldfish somatostatin sst5 receptor)

RN 421545-91-7 HCAPLUS

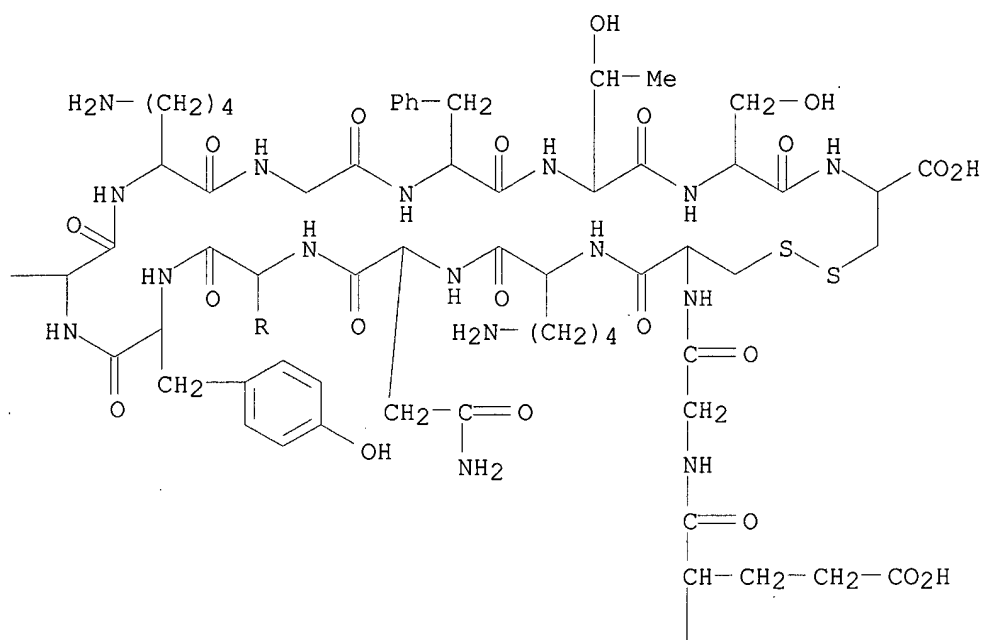
CN L-Cysteine, L-seryl-L-alanyl-L-.alpha.-glutamyl-L-seryl-L-seryl-L-asparaginyl-L-glutaminyl-L-leucyl-L-prolyl-L-threonyl-L-arginyl-L-valyl-L-arginyl-L-lysyl-L-.alpha.-glutamylglycyl-L-cysteinyl-L-lysyl-L-asparaginyl-L-phenylalanyl-L-tyrosyl-L-tryptophyl-L-lysylglycyl-L-phenylalanyl-L-threonyl-L-seryl-, cyclic (17.fwdarw.28)-disulfide (9CI) (CA INDEX NAME)

SEQ 1 SAESSNQLPT RVRKEGCKNF YWKGFTSC

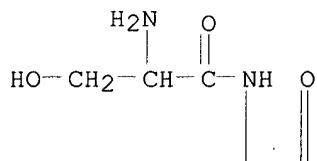
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PAGE 1-B

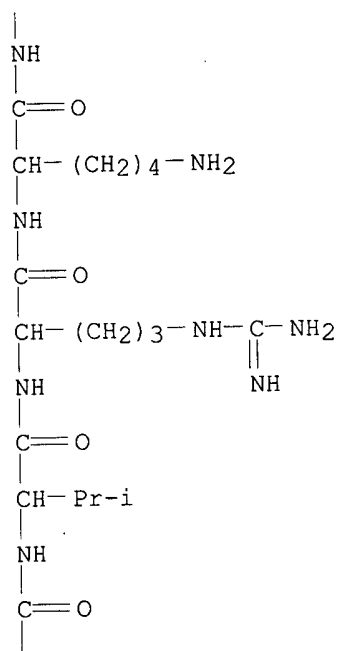


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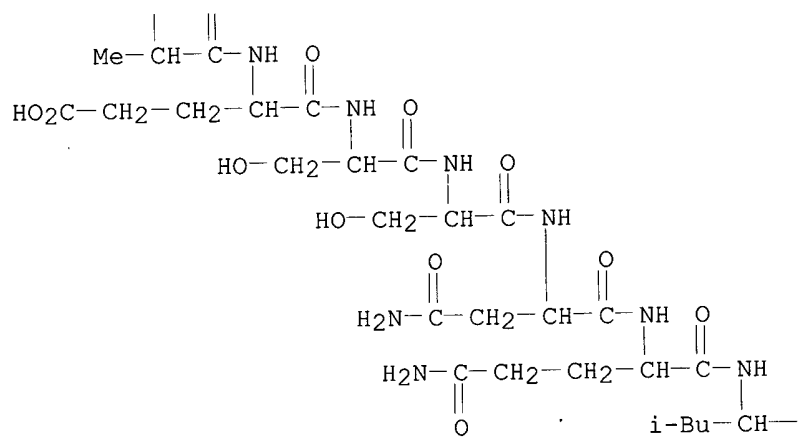




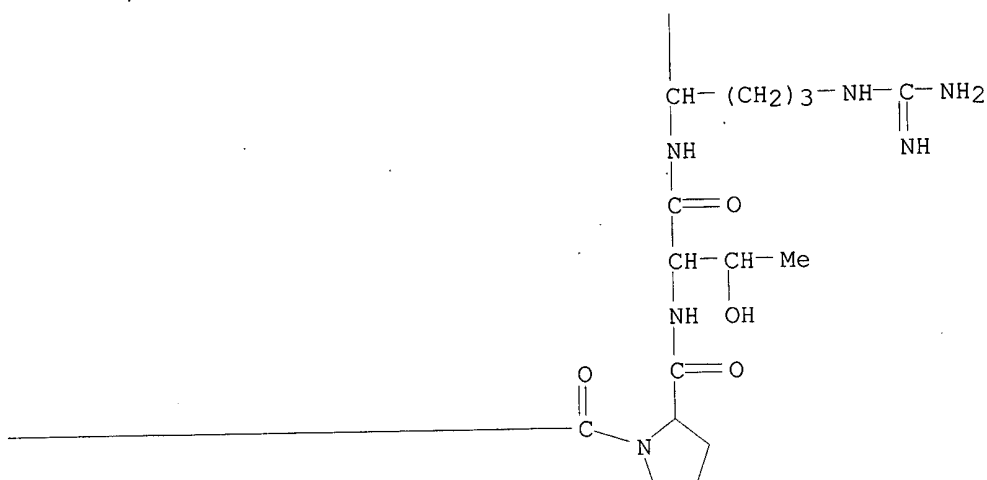
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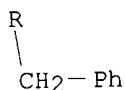
PAGE 3-A



PAGE 3-B



PAGE 4-A



REFERENCE COUNT: 73 THERE ARE 73 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 3 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1988:147444 HCAPLUS  
 DOCUMENT NUMBER: 108:147444  
 TITLE: Prosomatostatin processing in anglerfish brain, gut and pancreas  
 AUTHOR(S): Morel, Alain; Kuks, Paul F. M.; Bourdais, Julie; Cohen, Paul  
 CORPORATE SOURCE: Groupe Neurobiochim. Cell. Mol., Univ. Pierre et Marie Curie, Paris, 75006, Fr.  
 SOURCE: Biochemical and Biophysical Research Communications (1988), 151(1), 347-54  
 CODEN: BBRCA9; ISSN: 0006-291X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The distribution of somatostatin immunoreactive forms in 3 tissues of the anglerfish (*Lophius piscatorius*) was analyzed by a combination of gel permeation, HPLC, and amino acid anal. Prosomatostatins I and II were expressed in both neural and gastrointestinal tissues, and their posttranslational processing gave rise to somatostatin-14 I, somatostatin-28 II, and some of its 23-hydroxylysine deriv. In contrast to mammals, prodn. of 2 somatostatins in teleosts requires 2 structurally distinct precursors whose processing operates in a fixed rather than in a tissue-specific manner.  
 IT **93460-56-1**  
 RL: FORM (Formation, nonpreparative)  
 (formation of, by organs of anglerfish)  
 IT **93460-56-1**  
 RL: FORM (Formation, nonpreparative)  
 (formation of, by organs of anglerfish)

RN 93460-56-1 HCAPLUS  
CN Somatostatin-28 (sheep), 2-L-valine-3-L-aspartic acid-5-L-threonine-6-L-asparagine-7-L-asparagine-8-L-leucine-9-L-proline-21-L-tyrosine-24-glycine-(9CI) (CA INDEX NAME)

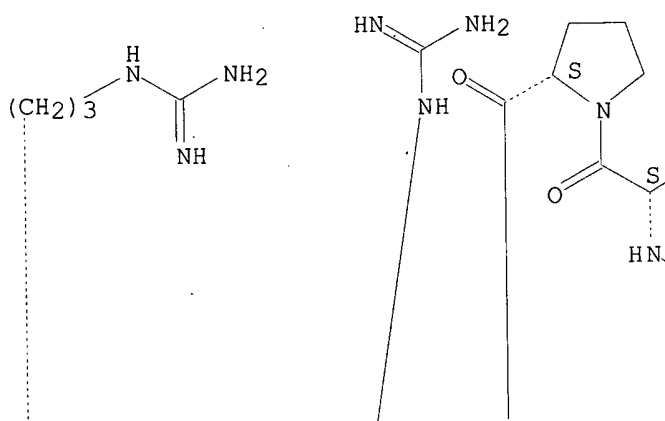
SEQ 1 SVDSTNNLPP RERKAGCKNF YWKGFTSC

Absolute stereochemistry.

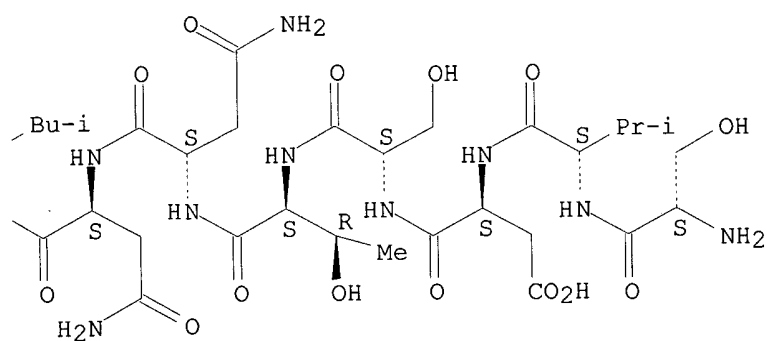
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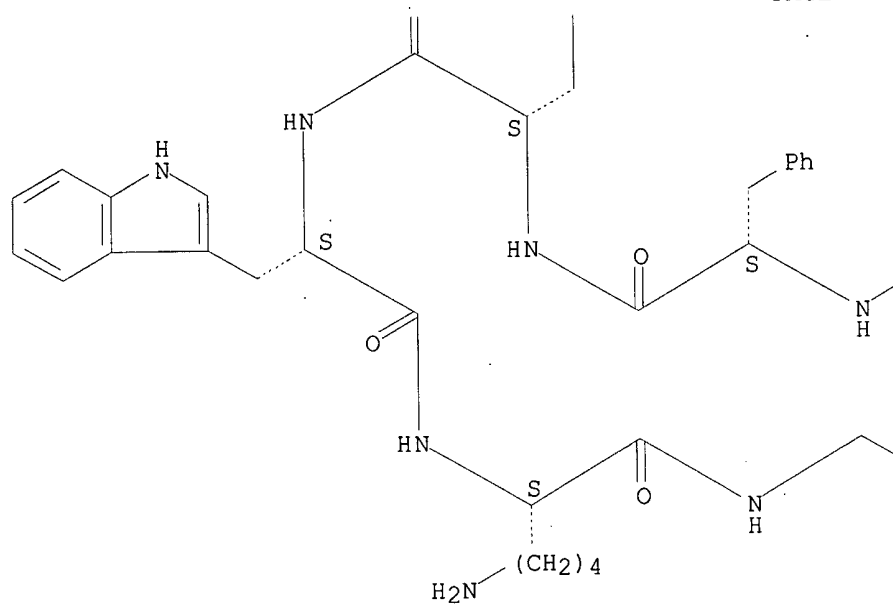
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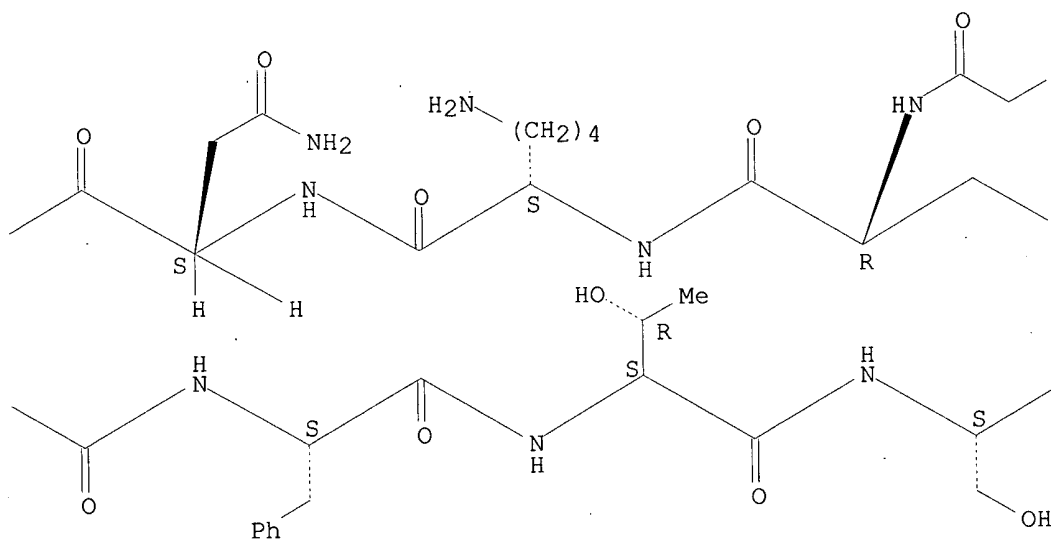
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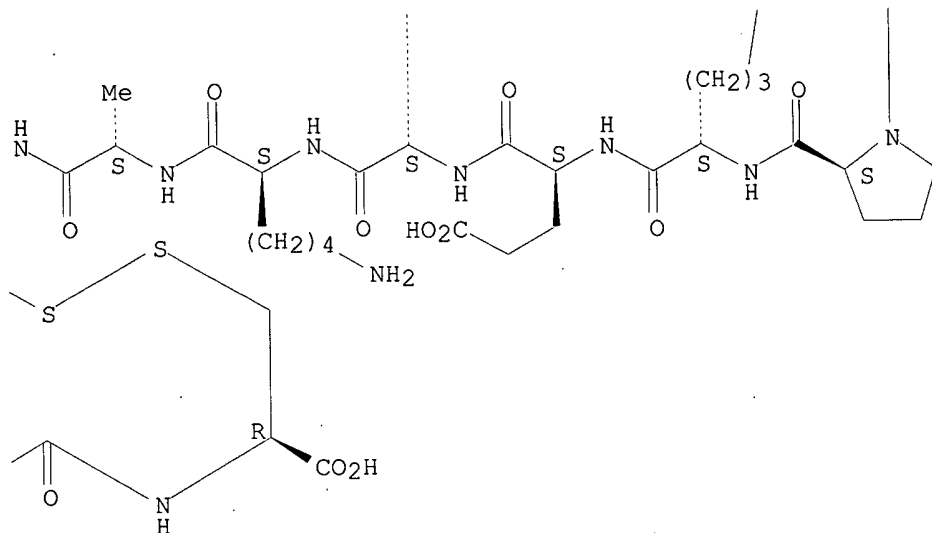


PAGE 2-A



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L20 ANSWER 4 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1987:631706 HCAPLUS

DOCUMENT NUMBER: 107:231706

TITLE: Post-translational processing of preprosomatostatin-II

AUTHOR(S): Andrews, P. C.; Nichols, R.; Dixon, Jack E.

CORPORATE SOURCE: Dep. Biochem., Purdue Univ., West Lafayette, IN,  
47907, USA

SOURCE: Journal of Biological Chemistry (1987), 262(26),  
12692-9

CODEN: JBCHA3; ISSN: 0021-9258

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The products and an intermediate of preprosomatostatin-II processing in the anglerfish islet were purified and subjected to structural anal. The peptides isolated identify the site of signal cleavage (between serine and glutamine). The prohormone is further processed at arginine in position 97 and, to a lesser extent, at the 2 adjacent basic amino acid residues lysine and arginine in positions 61 and 62, resp. A 28-residue somatostatin was also generated which can be hydroxylated at lysine in position 23. A proteolytic processing site which would form the 14-residue somatostatin does not appear to be used to a significant degree. Fast-atom bombardment mass spectrometry (FABMS) was used to demonstrate that the N-terminal residues of peptides 25-60, and 25-90 are pyroglutamic acid, a modification which precludes Edman degrdn. of these peptides. Anal. of the peptides and tryptic peptides maps by FABMS allowed confirmation of the sites of prohormone conversion and indicated that terminal basic residues were removed during processing. Three amino acid residues were also found to differ from the amino acid sequence deduced from the cDNA and were localized to specific regions by FABMS anal. Residues found to differ from the cDNA (cDNA in parentheses) were: aspartate-77 (threonine), valine-78 (phenylalanine), and glycine-9 (glutamate). Mass assignments were confirmed by running a single cycle of Edman degrdn. prior to FABMS. The peptides noted above were also examd. by Edman sequence anal. The sequence of a cDNA clone to preprosomatostatin-II was re-examd. in light of the obsd. differences at the protein level. This study emphasizes the utility of FABMS in prohormone processing studies and in identification of posttranslational processing events.

IT **93460-56-1**  
 RL: PRP (Properties)  
 (amino acid sequence of, of pancreas islet of anglerfish)  
 IT **93460-56-1**  
 RL: PRP (Properties)  
 (amino acid sequence of, of pancreas islet of anglerfish)  
 RN 93460-56-1 HCAPLUS  
 CN Somatostatin-28 (sheep), 2-L-valine-3-L-aspartic acid-5-L-threonine-6-L-asparagine-7-L-asparagine-8-L-leucine-9-L-proline-21-L-tyrosine-24-glycine-  
 (9CI) (CA INDEX NAME)

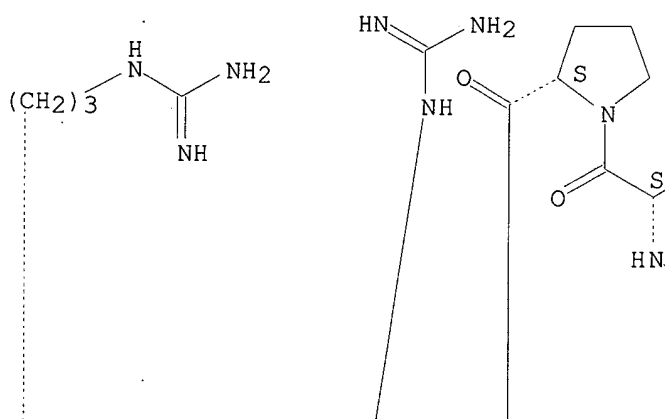
SEQ 1 SVDSTNNLPP RERKAGCKNF YWKGFTSC

Absolute stereochemistry.

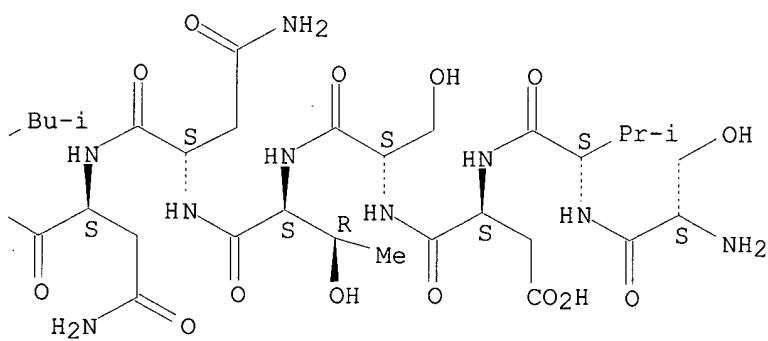
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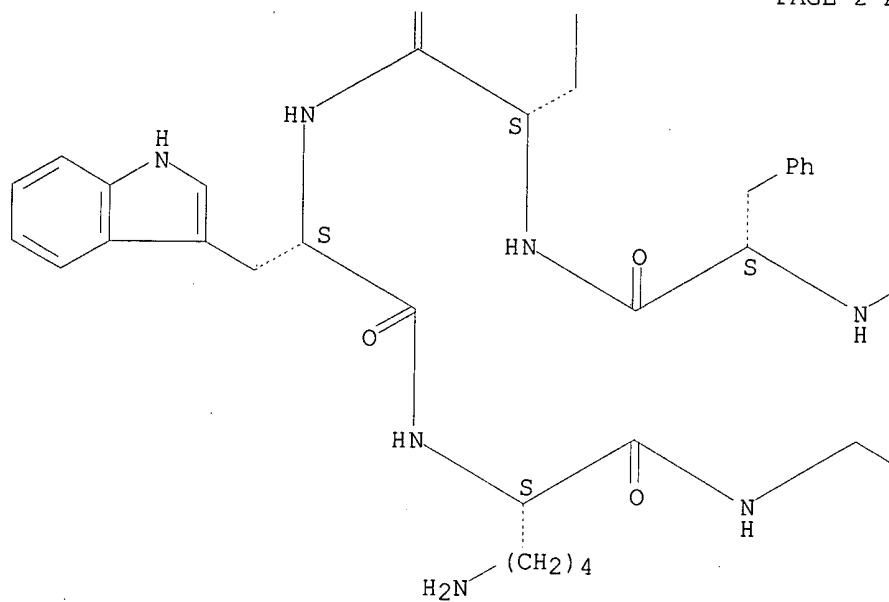


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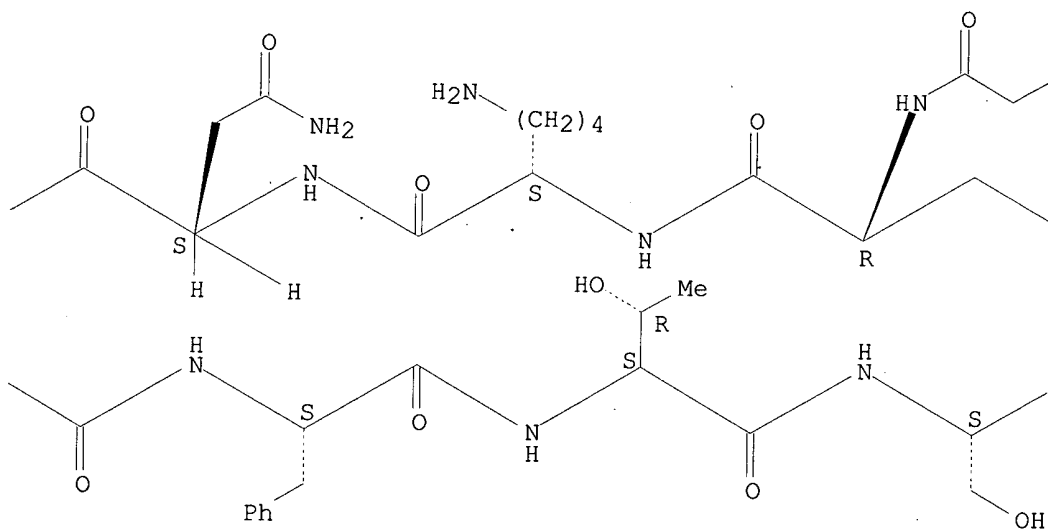


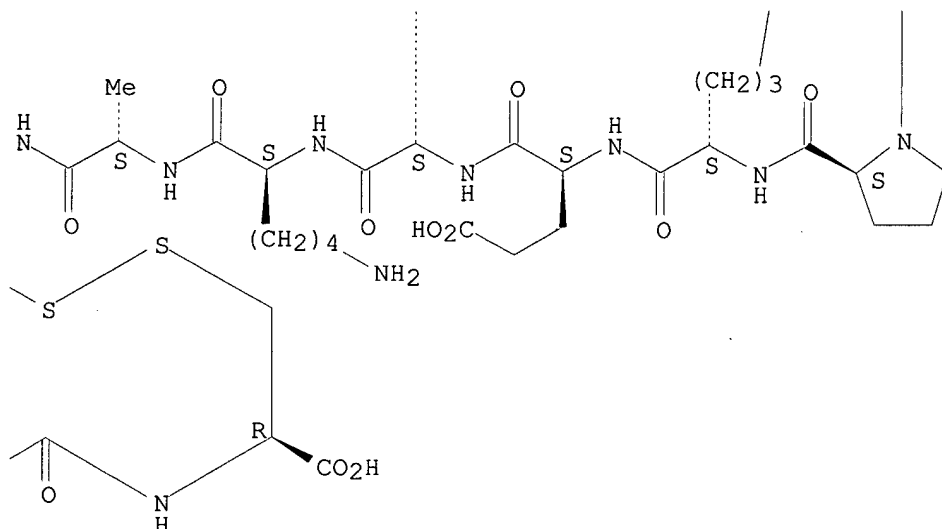


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L20 ANSWER 5 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1987:401206 HCAPLUS

DOCUMENT NUMBER: 107:1206

TITLE: Direct evidence for two distinct prosomatostatin converting enzymes. Detection using a rapid, sensitive, and specific assay for propeptide converting enzymes

AUTHOR(S): Mackin, Robert B.; Noe, Bryan D.

CORPORATE SOURCE: Sch. Med., Emory Univ., Atlanta, GA, 30322, USA

SOURCE: Journal of Biological Chemistry (1987), 262(14), 6453-6

CODEN: JBCHA3; ISSN: 0021-9258

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The processing of prosomatostatin-I (aPSS-I) and prosomatostatin-II (aPSS-II) to either somatostatin-14 (SS-14) or somatostatin-28 (aSS-28), resp., was examd. in anglerfish pancreatic islets. Two distinct forms of prosomatostatin-converting enzyme (PCE) activity were detected by a rapid, sensitive, and specific assay. Examn. of the specificity of these 2 enzyme activities showed that 1 proteolytic activity performed the aPSS-I-to-SS-14 conversion, whereas the other protease liberated aSS-28 from aPSS-II to produce [Tyr7,Gly10]SS-14 and converted proinsulin to insulin. The aSS-28-generating PCE did not process proinsulin. Thus, different, specific PCEs are required for liberation of SS-14 and aSS-28 from their precursors.

IT 79594-38-0

RL: FORM (Formation, nonpréparative)

(formation of, from prosomatostatin-II by converting enzyme of pancreas islet)

IT 79594-38-0

RL: FORM (Formation, nonpreparative)

(formation of, from prosomatostatin-II by converting enzyme of pancreas islet)

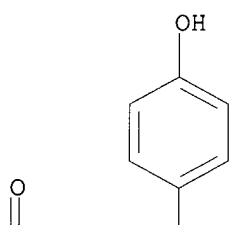
RN 79594-38-0 HCAPLUS

CN Somatostatin (sheep), 7-L-tyrosine-10-glycine- (9CI) (CA INDEX NAME)

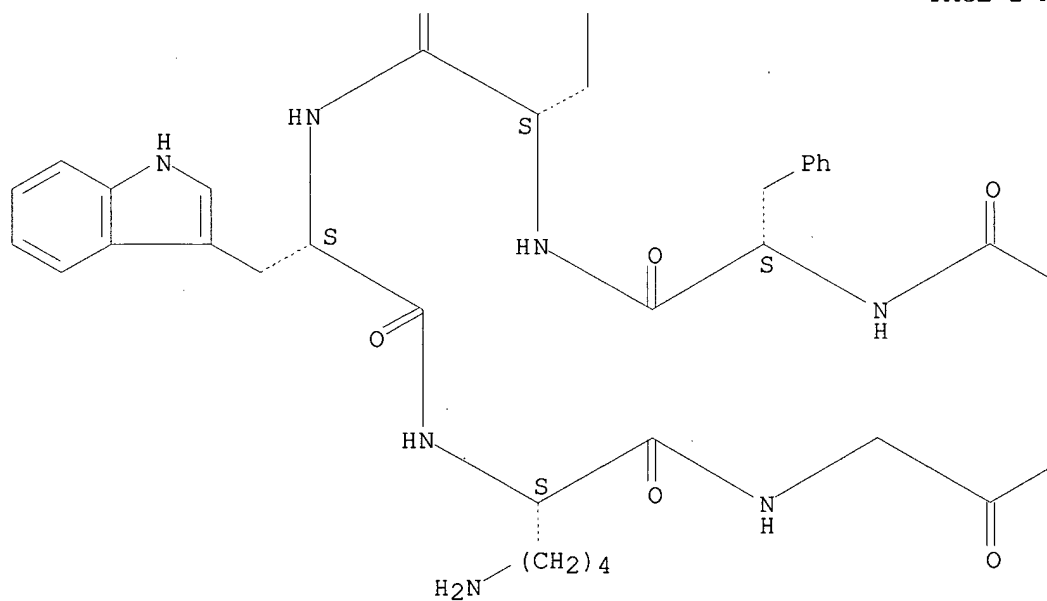
SEQ 1 AGCKNFYWKG FTSC

Absolute stereochemistry.

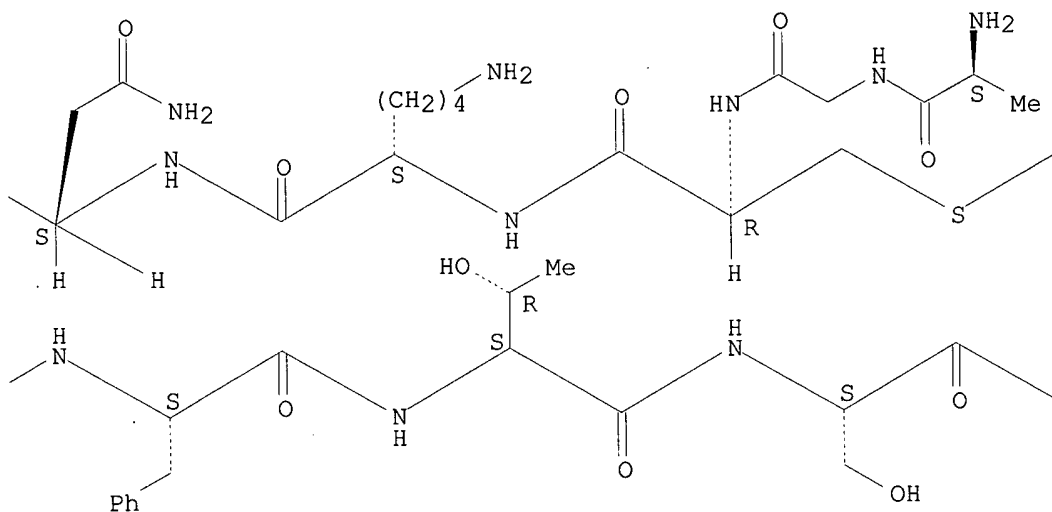
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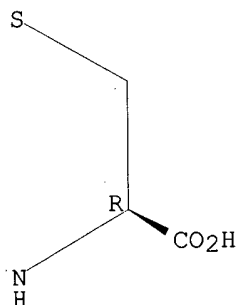
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L20 ANSWER 6 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1987:196782 HCAPLUS  
 DOCUMENT NUMBER: 106:196782  
 TITLE: Solid phase synthesis of somatostatin-28 II. A new biologically active octacosapeptide from anglerfish pancreatic islets  
 AUTHOR(S): Nicolas, Pierre; Delfour, Antoine; Boussetta, Hamadi; Morel, Alain; Rholam, Mohamed; Cohen, Paul  
 CORPORATE SOURCE: Groupe Neurobiochim. Cell. Mol., Univ. Pierre et Marie Curie, Paris, 75006, Fr.  
 SOURCE: Biochemical and Biophysical Research Communications (1986), 140(2), 565-73  
 CODEN: BBRC9; ISSN: 0006-291X

DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI

H-Ser-Val-Asp-Ser-Thr-Asn-Asn-Leu-  
 Pro-Pro-Arg-Glu-Arg-Lys-Ala-Gly-

Cys-Lys-Asn-Phe-Tyr-Trp-Lys-Gly-

Phe-Thr-Ser-Cys-OH

I

AB Anglerfish somatostatin-28 II (I) was synthesized by the solid-phase method along with its somatostatin-14 II and somatostatin-28 II-(1-12) corresponding domains. Homogeneity of the synthetic peptides was demonstrated by anal. reversed-phase HPLC, thin-layer chromatog., and electrophoresis. The peptides were further characterized by amino acids anal., fast-at. bombarding mass spectrometry, and/or 252Cf plasma desorption mass spectrometry. Synthetic I and somatostatin-14 II displace equally well the potent agonist (Tyro,D-Trp8)-somatostatin-14 from its specific binding sites on anterior pituitary cells membranes. Both peptides activate adenylate cyclase from dispersed rat anterior pituitary cells.

IT 107897-58-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (prepn. and biol. activity of)

IT 107897-58-5P

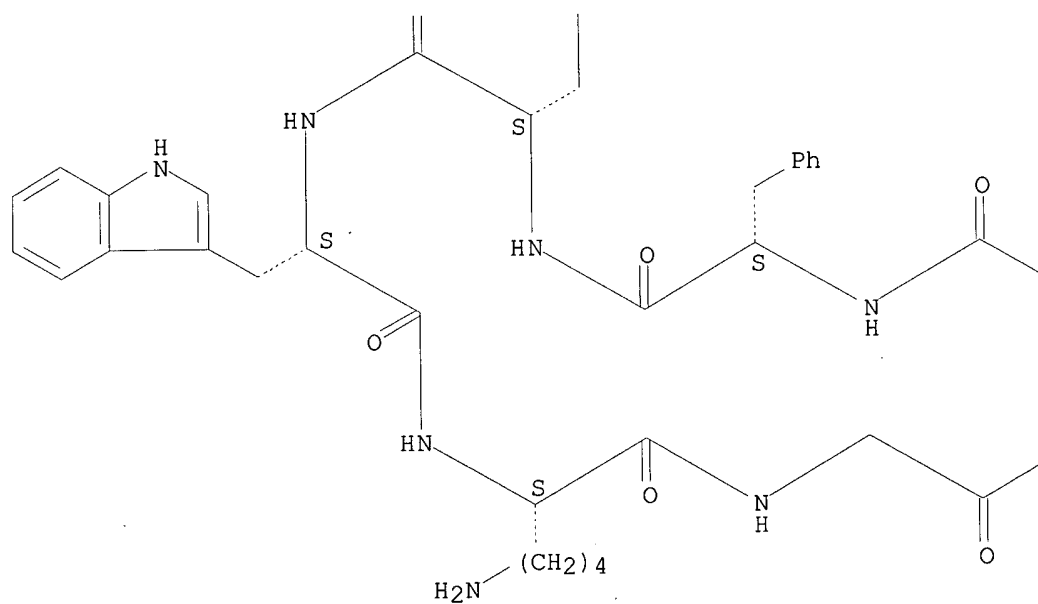
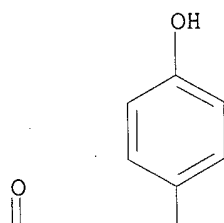
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (prepn. and biol. activity of)

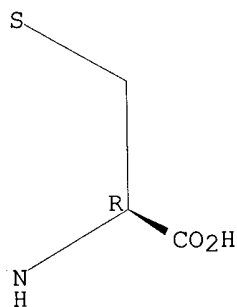
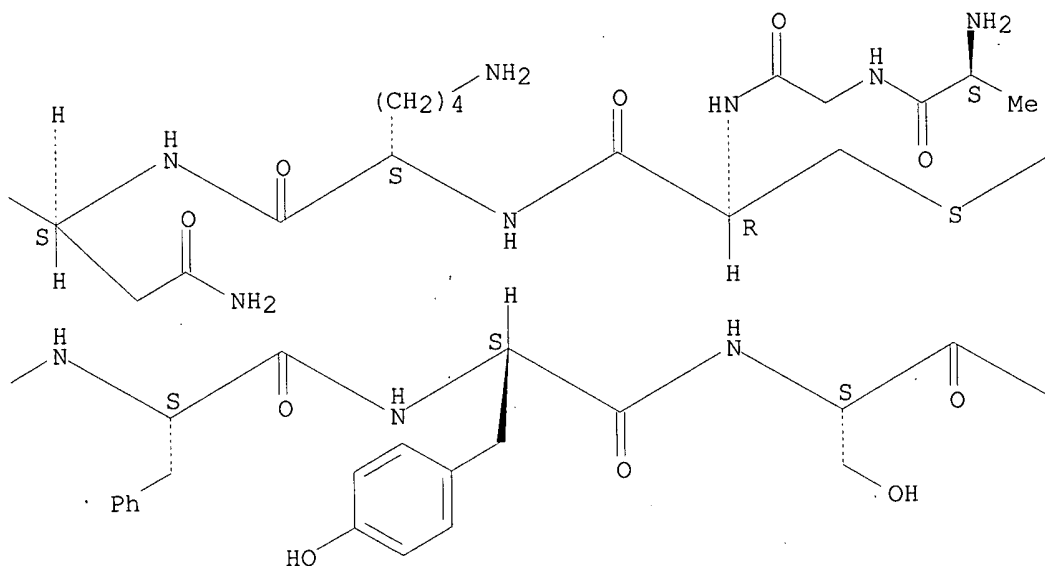
RN 107897-58-5 HCAPLUS

CN Somatostatin (sheep), 7-L-tyrosine-10-glycine-12-L-tyrosine- (9CI) (CA INDEX NAME)

SEQ 1 AGCKNFYWKGFYSC

Absolute stereochemistry.





L20 ANSWER 7 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1986:491649 HCAPLUS  
 DOCUMENT NUMBER: 105:91649  
 TITLE: Proteolytic events in the maturation of  
 pro-neuropeptides. The somatostatin model  
 AUTHOR(S): Morel, A.; Gluschkof, P.; Gomez, S.; Cohen, P.  
 CORPORATE SOURCE: Groupe Neurobiochim. Cell. Mol., Univ. Pierre et Marie  
 Curie, Paris, F 75006, Fr.  
 SOURCE: Annales d'Endocrinologie (1986), 47(1), 35-9  
 CODEN: ANENAG; ISSN: 0003-4266  
 DOCUMENT TYPE: Journal

LANGUAGE: French

AB The posttranslational processing (maturation) of precursors was studied with the model of prosomatostatin [74315-46-1]. A single and common precursor to both somatostatin-28 [75037-27-3] and -14 [51110-01-1] in the mouse hypothalamus, in contrast with the situation in the teleostean fish *Lophius piscatorius*, was obsd. The search for a maturation activity was carried out with synthetic undecapeptide substrate including in its sequence the cleavage site for somatostatin-14 release. By using this peptide, a specific enzyme activity of 90 kilodaltons was characterized in rat brain cortex exts. This maturase, colocalized in the neurosecretory granules with the somatostatin products, generates both the N-terminal peptide S-28 (1-12) [81286-16-0] and the tetradecapeptide hormone (S-14) from the somatostatin-28, acting as an S-28 convertase [97162-92-0] producing free arginine and lysine residues present at the pair of basic amino acid signals. A model is proposed in which 3 peptide bonds are cleaved by this enzymic activity. In the teleostean fish *L. piscatorius*, 2 precursors coding for 2 different somatostatins were predicted by the detn. of cDNA sequence. In this system, a unique form of the tetradecapeptide hormone was obsd. The final maturation product of the 2nd precursor was shown to be a new 28-amino acid hormone called somatostatin-28 II [93460-56-1]. Moreover, the product of this 2nd gene after the action of the S-28 convertase from rat brain cortex is the (Tyr7,Gly10)S-14 deriv. predicted by the clone. The lack of maturation of the 2nd precursor thus does not depend on the structure of this natural analog of S-28.

IT 93460-56-1

RL: FORM (Formation, nonpreparative)  
(formation of, of fish)

IT 93460-56-1

RL: FORM (Formation, nonpreparative)  
(formation of, of fish)

RN 93460-56-1 HCAPLUS

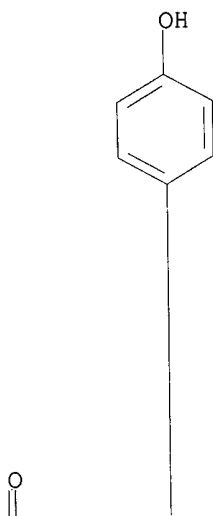
CN Somatostatin-28 (sheep), 2-L-valine-3-L-aspartic acid-5-L-threonine-6-L-asparagine-7-L-asparagine-8-L-leucine-9-L-proline-21-L-tyrosine-24-glycine-(9CI) (CA INDEX NAME)

SEQ 1 SVDSTNNLPP RERKAGCKNF YWKGFTSC

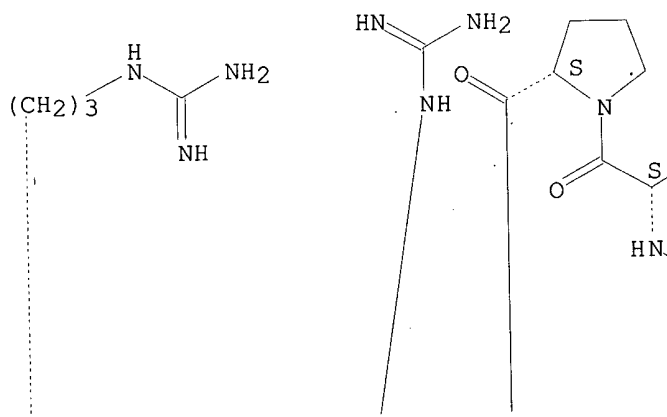
Absolute stereochemistry.

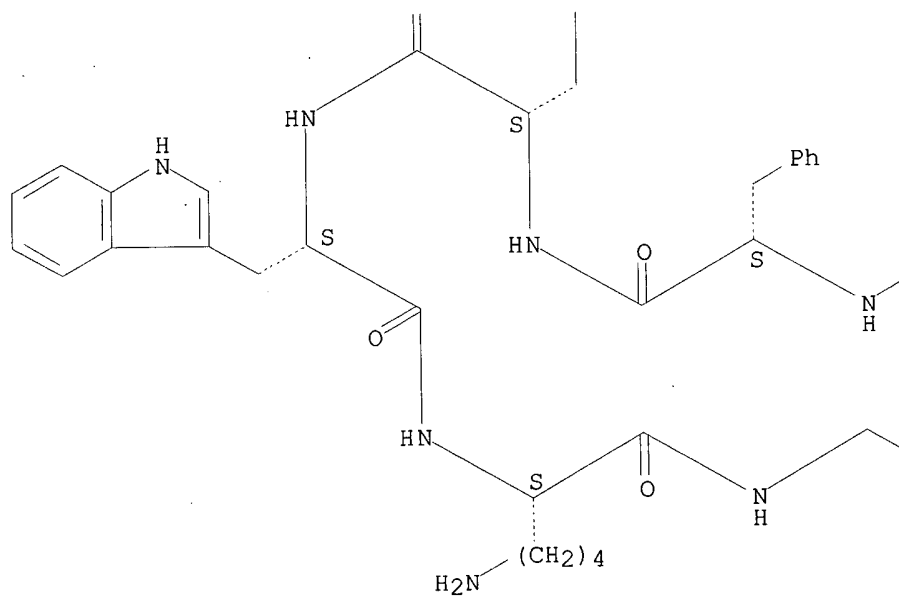
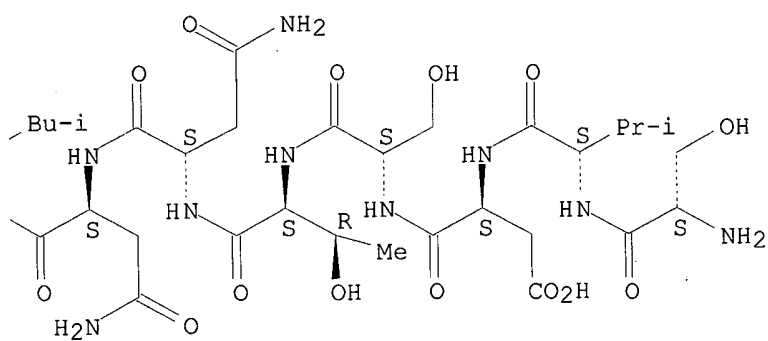


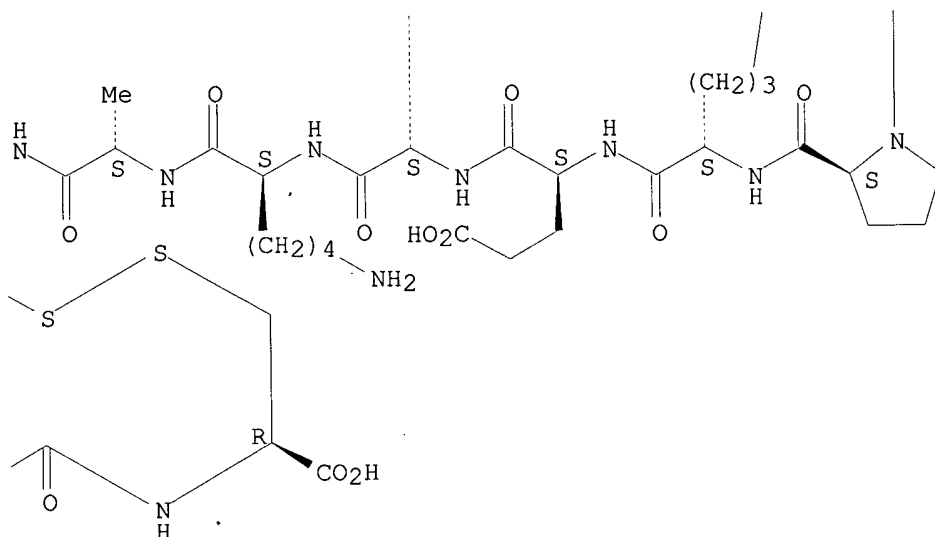
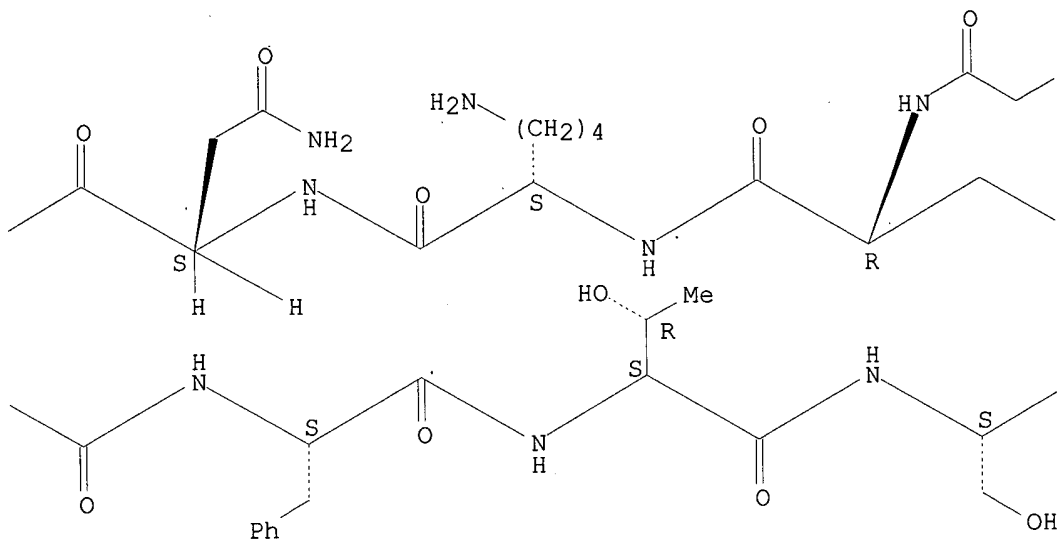
PAGE 1-A



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L20 ANSWER 8 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1986:443339 HCAPLUS  
 DOCUMENT NUMBER: 105:43339  
 TITLE: Insulin-selective somatostatin analogs for insulinoma treatment  
 INVENTOR(S): Spiess, Joachim; Noe, Bryan Dale  
 PATENT ASSIGNEE(S): Salk Institute for Biological Studies, USA  
 SOURCE: Eur. Pat. Appl., 19 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 173527	A2	19860305	EP 1985-305867	19850816
EP 173527	A3	19880203		
R: CH, DE, FR, GB, IT, LI				
ZA 8505567	A	19860326	ZA 1985-5567	19850723
AU 8546548	A1	19860306	AU 1985-46548	19850822
CA 1333892	A1	19950110	CA 1985-489706	19850829
JP 61065900	A2	19860404	JP 1985-191797	19850830
PRIORITY APPLN. INFO.:			US 1984-646610	19840831
GI				

H-Ser-Val-Asp-Ser-Thr-Asn-Asn-Leu-Pro-Pro-

Arg-Glu-Arg-Lys-Ala-Gly-Cys-Lys-Asn-Phe-

Tyr-Trp-X<sup>1</sup>-Gly-Phe-Thr-Ser-Cys-OH I

AB Peptides (I; X<sup>1</sup> = Hyl, Lys) that are related to anglerfish somatostatin-28 were prepd., and were useful in the treatment of insulinoma. I (X<sup>1</sup> = Hyl) was prepd. by solid-phase synthesis.

IT **93460-56-1P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, for treatment of insulinoma)

IT **93460-56-1P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, for treatment of insulinoma)

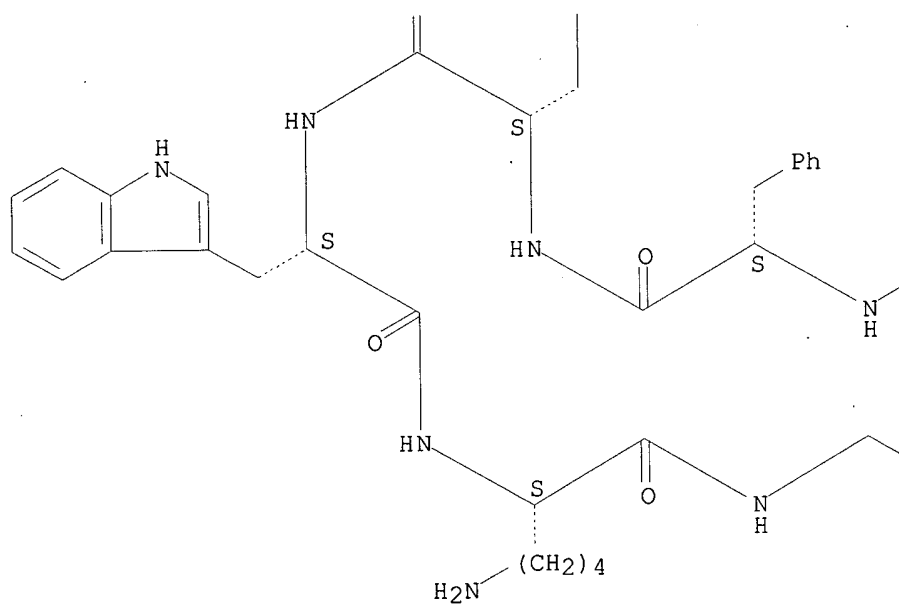
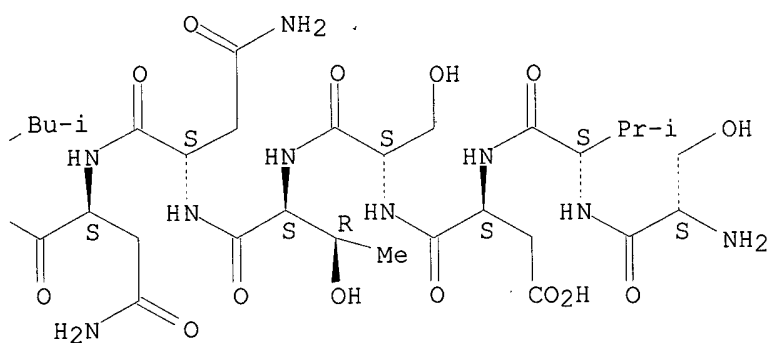
RN 93460-56-1 HCAPLUS

CN Somatostatin-28 (sheep), 2-L-valine-3-L-aspartic acid-5-L-threonine-6-L-asparagine-7-L-asparagine-8-L-leucine-9-L-proline-21-L-tyrosine-24-glycine-  
(9CI) (CA INDEX NAME)

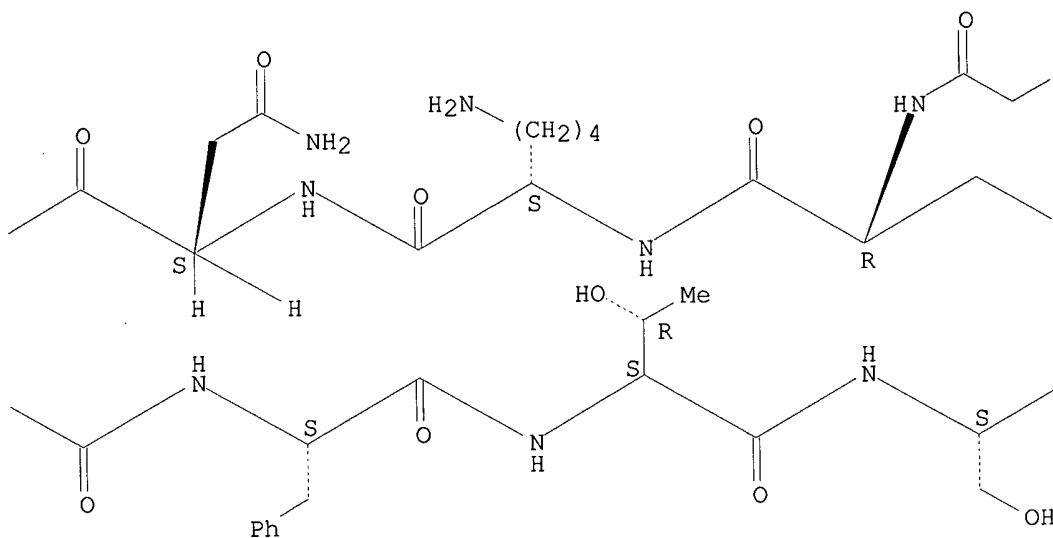
SEQ 1 SVDSTNNLPP RERKAGCKNF YWKGFTSC

Absolute stereochemistry.

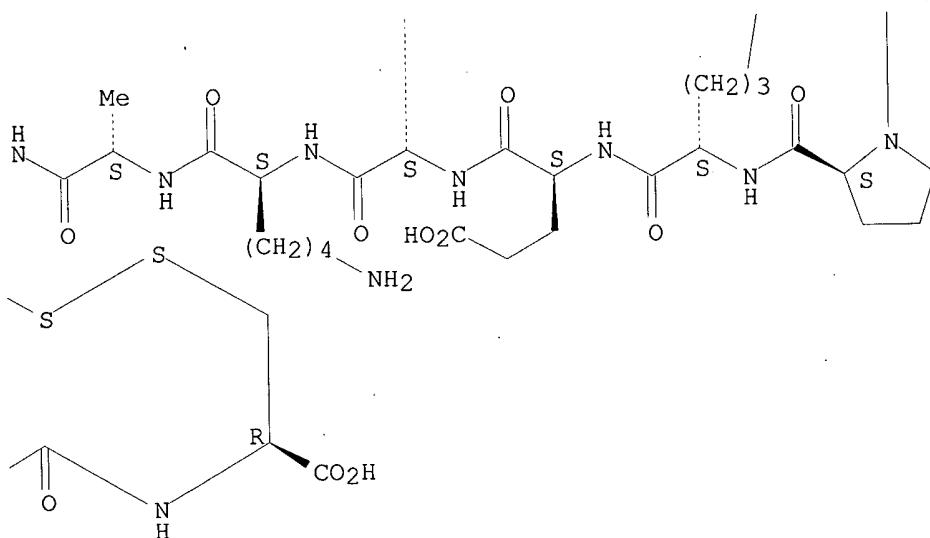




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L20 ANSWER 9 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1985:108375 HCAPLUS

DOCUMENT NUMBER: 102:108375

TITLE: Anglerfish preprosomatostatin II is processed to somatostatin-28 and contains hydroxylysine at residue 23

AUTHOR(S): Andrews, P. C.; Hawke, David; Shively, John E.; Dixon, Jack E.

CORPORATE SOURCE: Dep. Biochem., Purdue Univ., West Lafayette, IN, 47907, USA

SOURCE: Journal of Biological Chemistry (1984), 259(24), 15021-4

CODEN: JBCHA3; ISSN: 0021-9258

DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB A peptide fraction contg. two 28-residue somatostatins, both products of the anglerfish (*Lophius americanus*) somatostatin II gene, was isolated, characterized, and subjected to amino acid sequence anal. One of the 2 forms of the 28-residue peptide contained 5-hydroxylysine. Hydroxylysine was identified in an acid hydrolyzate of somatostatin-28 by gas chromatog./mass spectrometry. Fast-atom bombardment mass spectrometry indicated that the 2 forms of somatostatin-28 have mol. wts. of 3220 and 3204, representing the hydroxylated and nonhydroxylated peptides, resp. The location of the hydroxylated lysine was deduced by anal. of proteolytic fragments to be position 23. This represents the 1st observation of a hydroxylated peptide hormone and 1 of the few reported occurrences of hydroxylysine in noncollagen proteins.

IT 93460-56-1

RL: BIOL (Biological study)  
 (of pancreatic islet, of anglerfish, amino acid sequence of)

IT 93460-56-1

RL: BIOL (Biological study)  
 (of pancreatic islet, of anglerfish, amino acid sequence of)

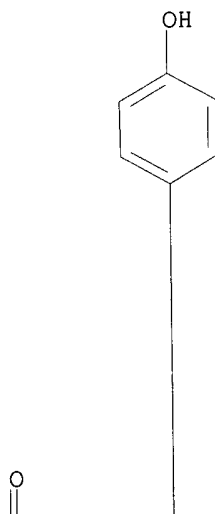
RN 93460-56-1 HCAPLUS

CN Somatostatin-28 (sheep), 2-L-valine-3-L-aspartic acid-5-L-threonine-6-L-asparagine-7-L-asparagine-8-L-leucine-9-L-proline-21-L-tyrosine-24-glycine-(9CI) (CA INDEX NAME)

SEQ 1 SVDSTNNLPP RERKAGCKNF YWKGFTSC

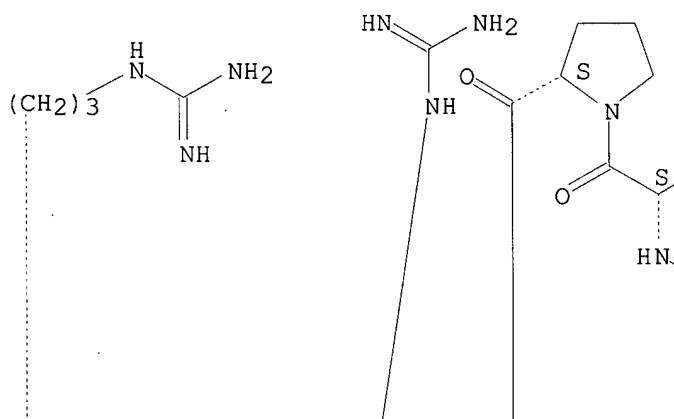
Absolute stereochemistry.

PAGE 1-A

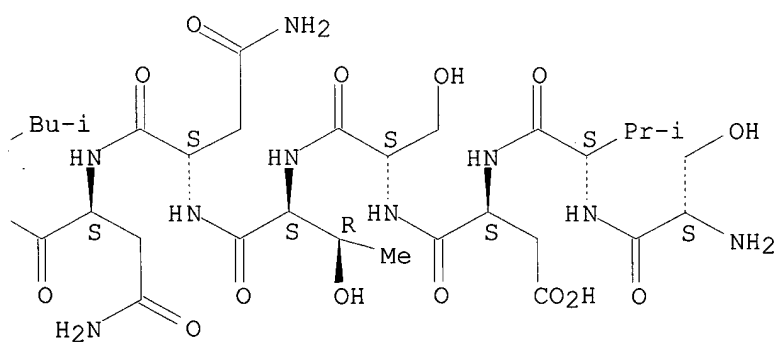




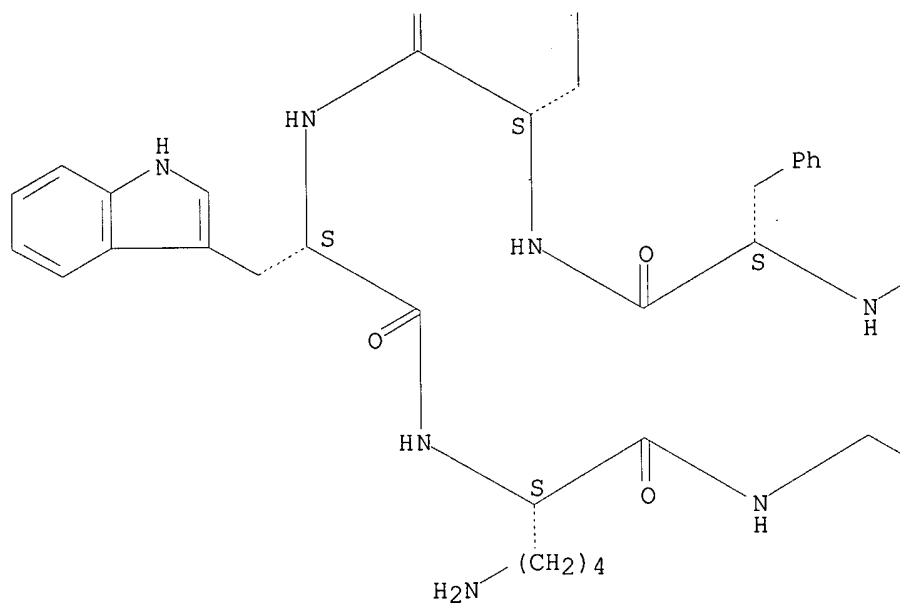
PAGE 1-C



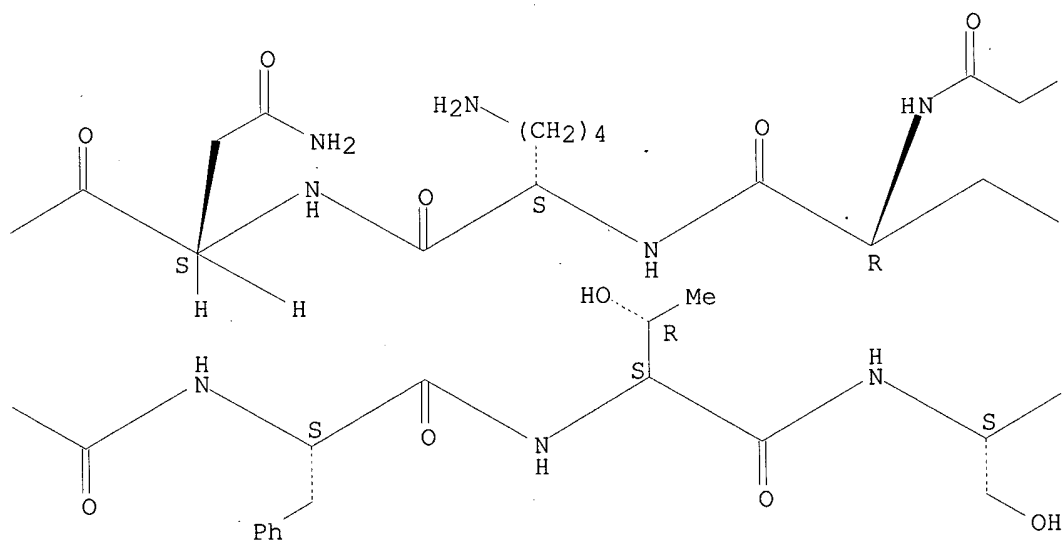
PAGE 1-D

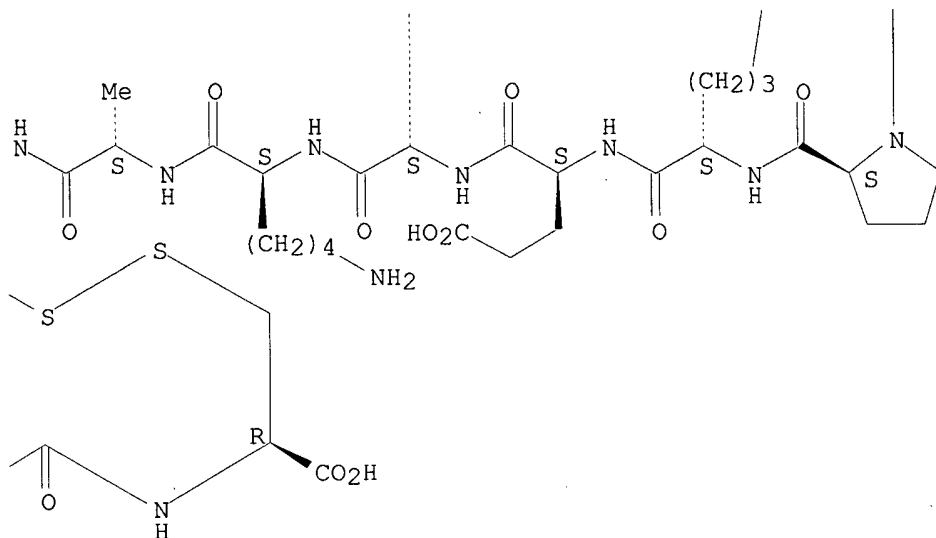


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L20 ANSWER 10 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1985:43149 HCAPLUS

DOCUMENT NUMBER: 102:43149

TITLE: Characterization of a somatostatin-28 containing the (Tyr-7, Gly-10) derivative of somatostatin-14: a terminal active product of prosomatostatin II processing in anglerfish pancreatic islets

AUTHOR(S): Morel, Alain; Gluschankof, Pablo; Gomez, Sophie; Fafeur, Veronique; Cohen, Paul

CORPORATE SOURCE: Groupe Neurobiochim. Cell. Mol., Univ. Pierre et Marie Curie, Paris, 75006, Fr.

SOURCE: Proceedings of the National Academy of Sciences of the United States of America (1984), 81(22), 7003-6  
CODEN: PNASA6; ISSN: 0027-8424

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Anglerfish (*Lophius piscatorius*) Brockmann organs contained a form of somatostatin-14, identical to the hypothalamic tetradecapeptide, and 2 distinct forms of somatostatin-28, which were sep'd. by reversed-phase HPLC. Anal. of the N-terminal amino acid sequence and comparison of the ability to incorporate <sup>125</sup>I indicated that 1 of these forms corresponds to an octacosapeptide including in its sequence the 7-tyrosine, 10-glycine-contg. (Tyr-7, Gly-10) deriv. of somatostatin-14 (somatostatin II). Exposure of this somatostatin-28 species to an endopeptidase activity from the rat brain cortex generated a peptide immunol. related to somatostatin and undistinguishable from synthetic (Tyr-7, Gly-10) somatostatin-14 II by HPLC. This somatostatin-28 II exhibited a potent inhibitory effect on growth hormone release by rat anterior pituitary cells, comparable to the other somatostatin-28 form. Since (Tyr-7, Gly-10) somatostatin-14 II cannot be detected in anglerfish pancreatic islets, the results indicate that somatostatin-28 II represents the terminal active product of prosomatostatin II processing, whose structure was predicted from the cDNA nucleotide sequence corresponding to the 2nd mRNA cloned from anglerfish Brockmann organs.

IT 93460-56-1

RL: PROC (Process)

(of pancreatic islets, characterization of)

IT 93460-56-1

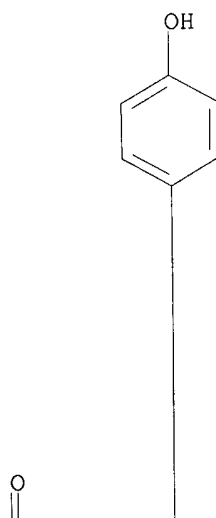
RL: PROC (Process)

(of pancreatic islets, characterization of)  
RN 93460-56-1 HCAPLUS  
CN Somatostatin-28 (sheep), 2-L-valine-3-L-aspartic acid-5-L-threonine-6-L-  
asparagine-7-L-asparagine-8-L-leucine-9-L-proline-21-L-tyrosine-24-glycine-  
(9CI) (CA INDEX NAME)

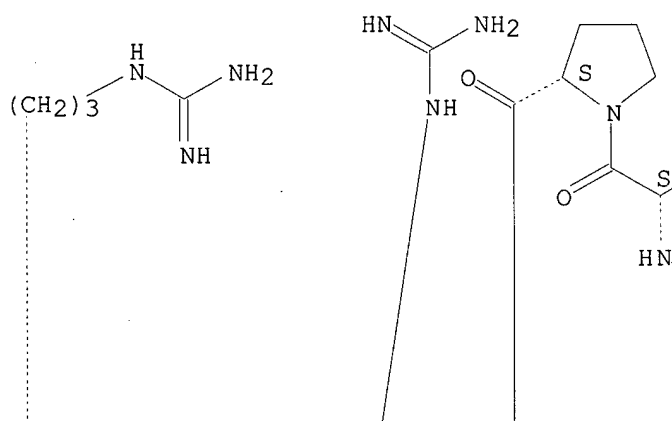
SEQ 1 SVDSTNNLPP RERKAGCKNF YWKGFTSC

Absolute stereochemistry.

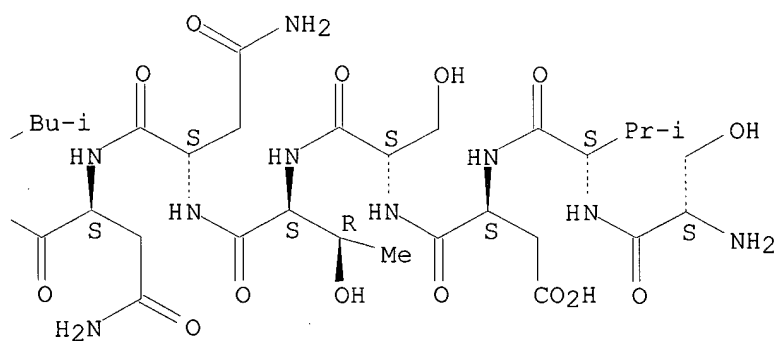
PAGE 1-A



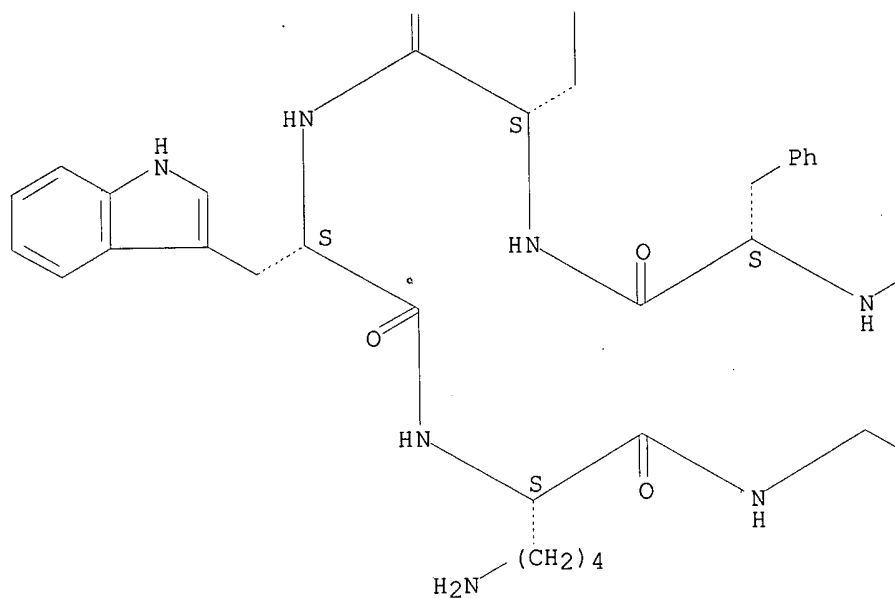
PAGE 1-C



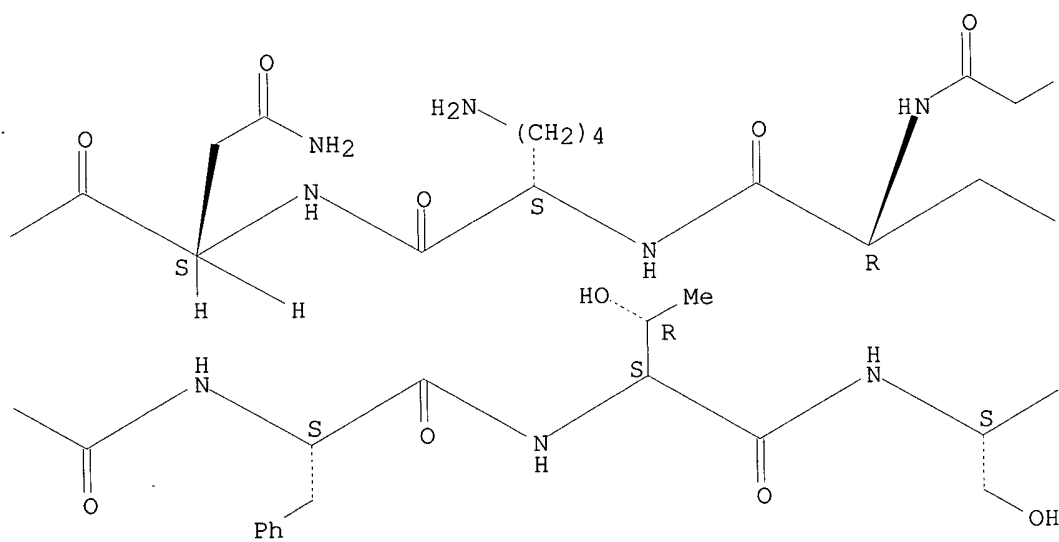
PAGE 1-D

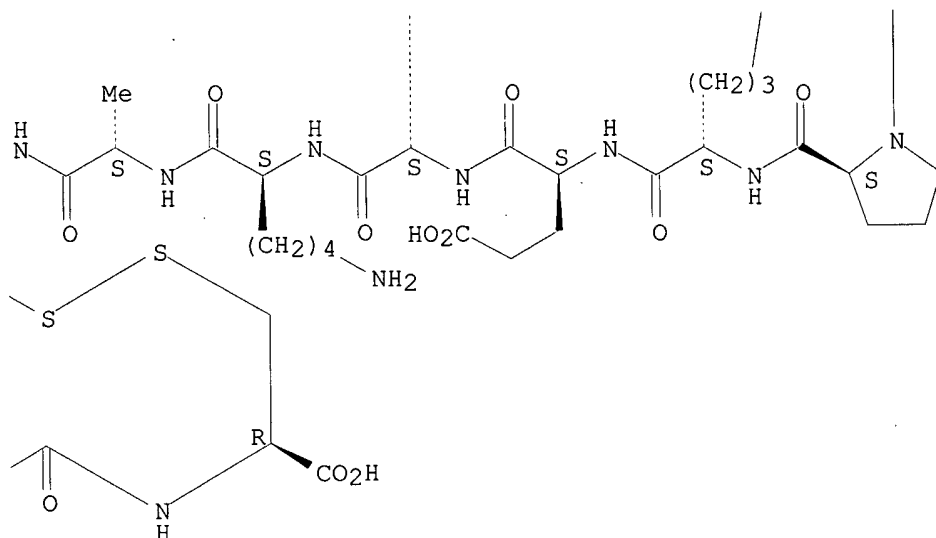


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L20 ANSWER 11 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1985:21486 HCAPLUS

DOCUMENT NUMBER: 102:21486

TITLE: The complete amino acid sequence of anglerfish somatostatin-28 II. A new octacosapeptide containing the (Tyr7, Gly10) derivative of somatostatin-14 I

AUTHOR(S): Morel, Alain; Chang, Jui Yoa; Cohen, Paul

CORPORATE SOURCE: Groupe Neurobiochim. Cell. Mol., Univ. Pierre et Marie Curie, Paris, 75006, Fr.

SOURCE: FEBS Letters (1984), 175(1), 21-4

CODEN: FEBLAL; ISSN: 0014-5793

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A somatostatin-28 was isolated from the teleostean fish (*Lophius piscatorius*) Brockmann organs. Its amino acid sequence indicates that it corresponds to an octacosapeptide contg. in its C-terminal end the Tyr-7 Gly-10 deriv. of somatostatin-14 I. This structure is in agreement with that predicted from a cDNA nucleotide sequence. Since the corresponding somatostatin-14 II cannot be detected in this organ, somatostatin-28 II is a terminal product of prosomatostatin II processing in anglerfish pancreatic islets.

IT **93460-56-1**

RL: PRP (Properties)  
(amino acid sequence of)

IT **93460-56-1**

RL: PRP (Properties)  
(amino acid sequence of)

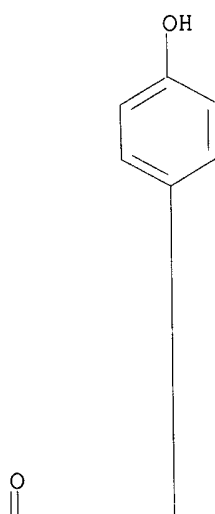
RN 93460-56-1 HCAPLUS

CN Somatostatin-28 (sheep), 2-L-valine-3-L-aspartic acid-5-L-threonine-6-L-asparagine-7-L-asparagine-8-L-leucine-9-L-proline-21-L-tyrosine-24-glycine-  
(9CI) (CA INDEX NAME)

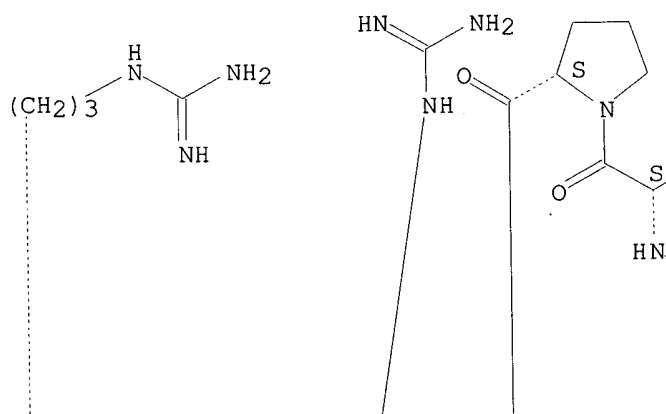
SEQ 1 SVDSTNNLPP RERKAGCKNF YWKGFTSC

Absolute stereochemistry.

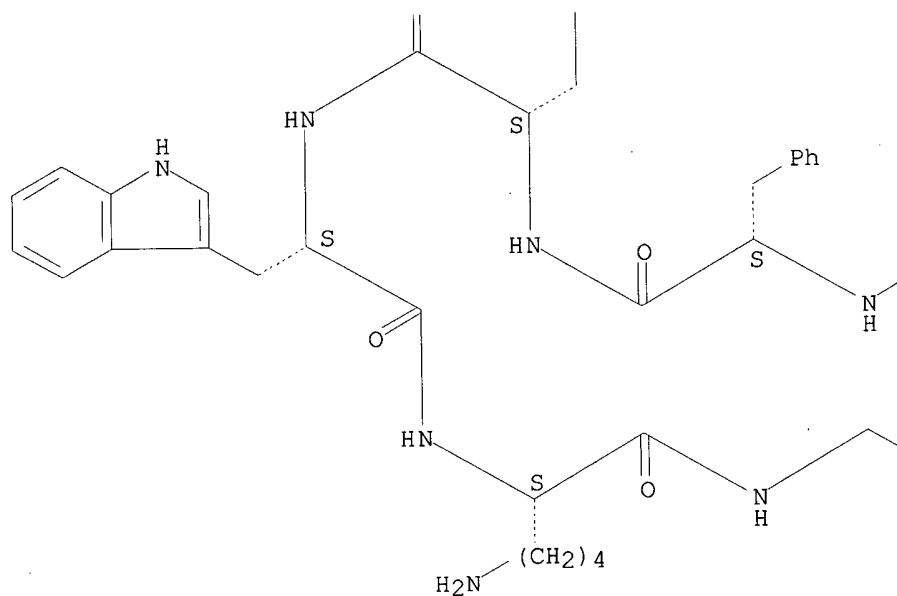
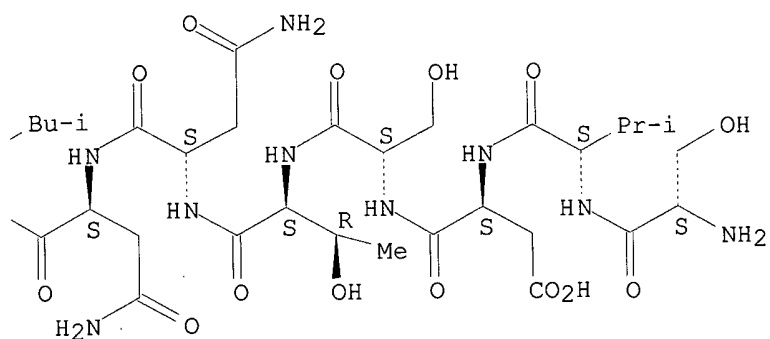
PAGE 1-A



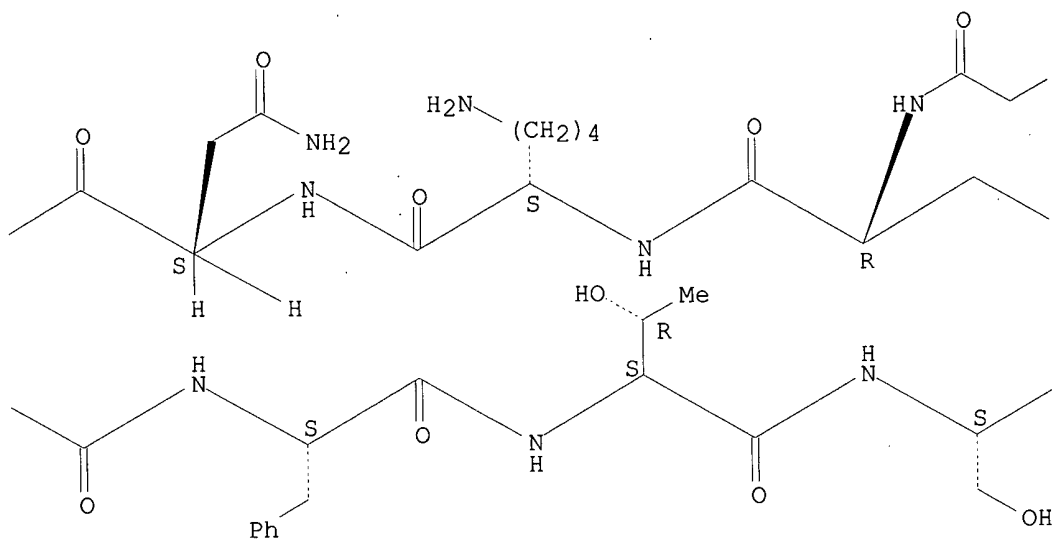
PAGE 1-C



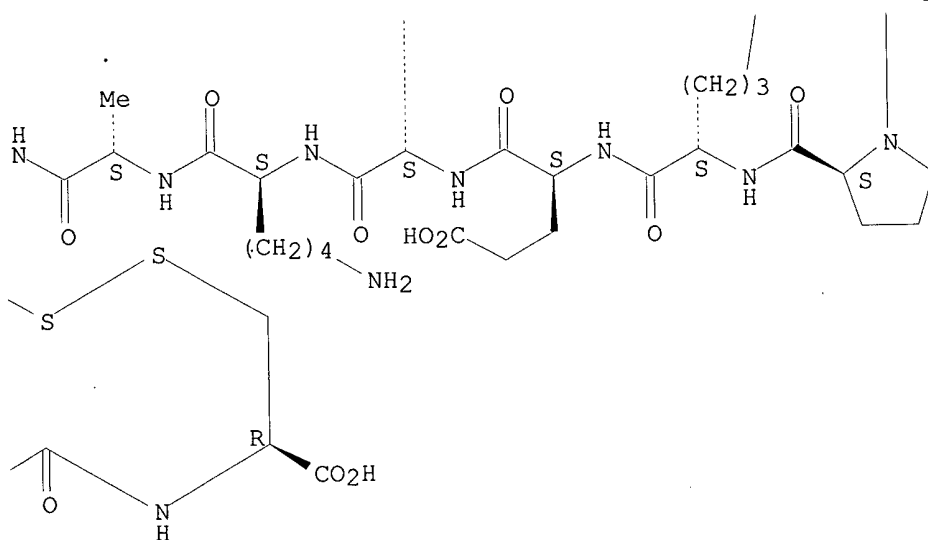




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L20 ANSWER 12 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1983:84970 HCAPLUS

DOCUMENT NUMBER: 98:84970

TITLE: Evidence for biosynthesis and differential post-translational proteolytic processing of different (pre)prosomatostatins in pancreatic islets

AUTHOR(S): Noe, Bryan D.; Spiess, Joachim

CORPORATE SOURCE: Sch. Med., Emory Univ., Atlanta, GA, 30322, USA

SOURCE: Journal of Biological Chemistry (1983), 258(2), 1121-8

CODEN: JBCHA3; ISSN: 0021-9258

DOCUMENT TYPE: Journal

LANGUAGE: English

AB In anglerfish (AF) pancreatic islets, somatostatin-14 (SS-14) is

synthesized via a precursor-product pathway. Sequence analyses of cDNAs prep'd. from AF islet mRNA have demonstrated the presence of mRNAs coding for 3 different AF preprosomatostatins. From these sequences it was predicted that 2 of the 3 precursors contain SS-14 at their C-terminus, whereas the 3rd has an analog form, [Tyr7,Gly10]SS-14, as its predicted C-terminus. Reverse-phase high-pressure liq. chromatog. was used to perform peptide mapping on the S-carboxymethylated (CM) tryptic products of mol. wt. (Mr) 8000-15,000, 2500-8000, and 1000-2000 peptides previously labeled in vitro with [3H]tryptophan and [35S]cysteine. Tryptic peptides generated from the Mr = 8000-15,000 and 2500-8000 polypeptides and labeled with 3H or 35S were eluted under different chromatog. conditions. Several of these peptides had retention times which did not deviate significantly from those of the CM tryptic products from both synthetic SS-14 and [Tyr7,Gly10]SS-14. The Mr = 1000-2000 peptides yielded only tryptic fragments identical with those generated from SS-14. The identities of the peptides that behaved in reverse-phase high pressure liq. chromatog. like the C-terminal tryptic fragments of SS-14 and [Tyr7,Gly10]SS-14 were confirmed by amino acid and sequence analyses. Thus, the gene coding for the [Tyr7,Gly10]SS-14-contg. precursor is expressed and the product of proteolytic processing of this precursor is significantly larger than SS-14. This indicates that the precursors which contain SS-14 and [Tyr7,Gly10]SS-14 are apparently subjected to differential post-translational proteolytic processing.

IT **79594-38-0P**  
 RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PREP (Preparation) (formation of, by anglerfish pancreatic islets, precursors in)

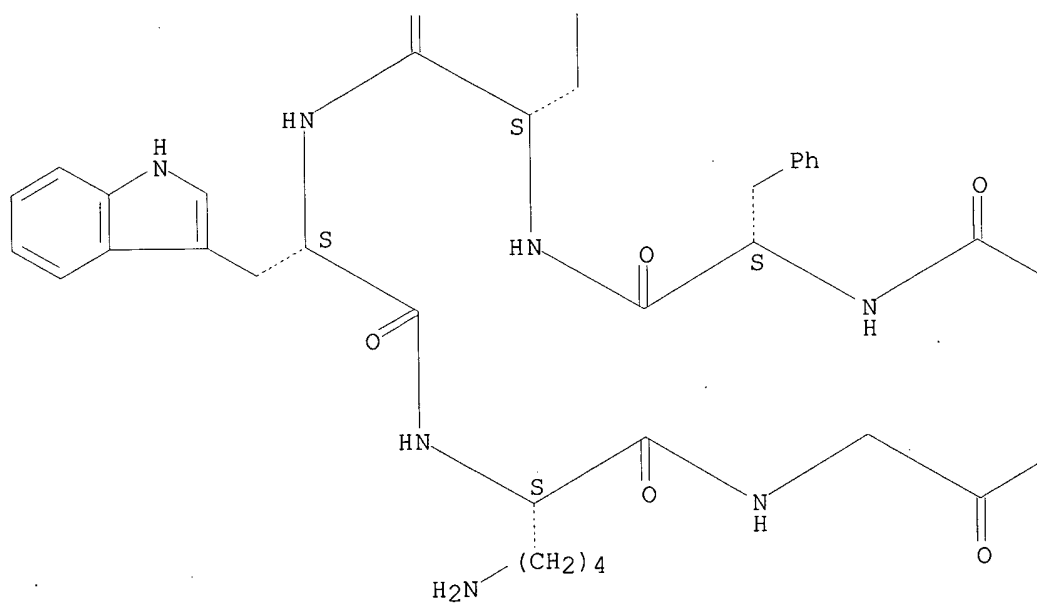
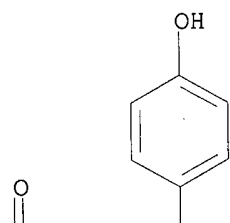
IT **79594-38-0P**  
 RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PREP (Preparation) (formation of, by anglerfish pancreatic islets, precursors in)

RN 79594-38-0 HCAPLUS

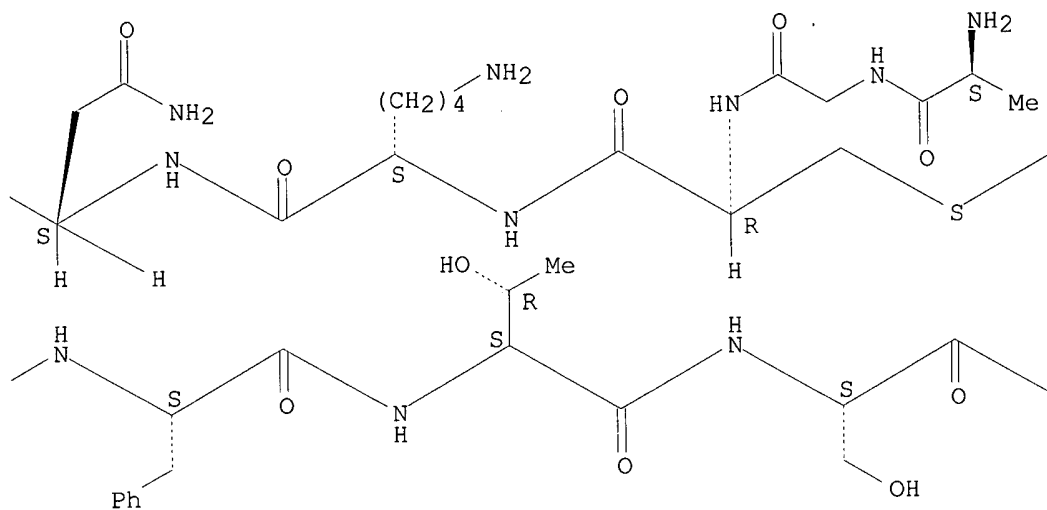
CN Somatostatin (sheep), 7-L-tyrosine-10-glycine- (9CI) (CA INDEX NAME)

SEQ 1 AGCKNFYWKG FTSC

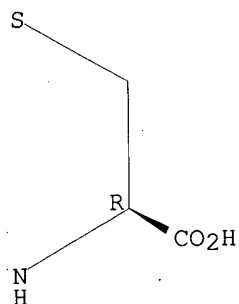
Absolute stereochemistry.



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L20 ANSWER 13 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1981:584222 HCAPLUS  
 DOCUMENT NUMBER: 95:184222  
 TITLE: Synthesis of one form of pancreatic islet somatostatin predominates  
 AUTHOR(S): Noe, Bryan D.  
 CORPORATE SOURCE: Sch. Med., Emory Univ., Atlanta, GA, 30322, USA  
 SOURCE: Journal of Biological Chemistry (1981), 256(18), 9397-400  
 CODEN: JBCHA3; ISSN: 0021-9258  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB To det. the relative amt. of a newly described form of somatostatin

([Tyr7,Gly10]somatostatin) which is synthesized in anglerfish islets, the somatostatin-contg. pools from gel filtration eluates of exts. of islets incubated with [3H]tryptophan and [35S]cysteine or [14C]isoleucine were subjected to isocratic elution on reverse-phase high-pressure liq. chromatog. Essentially all of the somatostatin immunoreactivity and 86-92% of the [3H]tryptophan radioactivity coeluted with authentic somatostatin. Only 1.6% of the total [3H]tryptophan radioactivity recovered eluted at the elution position of the [Tyr7,Gly10] synthetic analog of somatostatin. Thus, tetradecapeptide somatostatin is by far the predominant form of somatostatin synthesized in anglerfish islets and questions are raised regarding the utility of the mRNA which codes for the precursor having the [Tyr7,Gly10] analog of somatostatin at its C terminus.

IT 79594-38-0

RL: FORM (Formation, nonpreparative)

(formation of, by pancreatic islets of anglerfish)

IT 79594-38-0

RL: FORM (Formation, nonpreparative)

(formation of, by pancreatic islets of anglerfish)

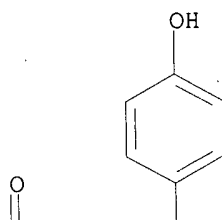
RN 79594-38-0 HCAPLUS

CN Somatostatin (sheep), 7-L-tyrosine-10-glycine- (9CI) (CA INDEX NAME)

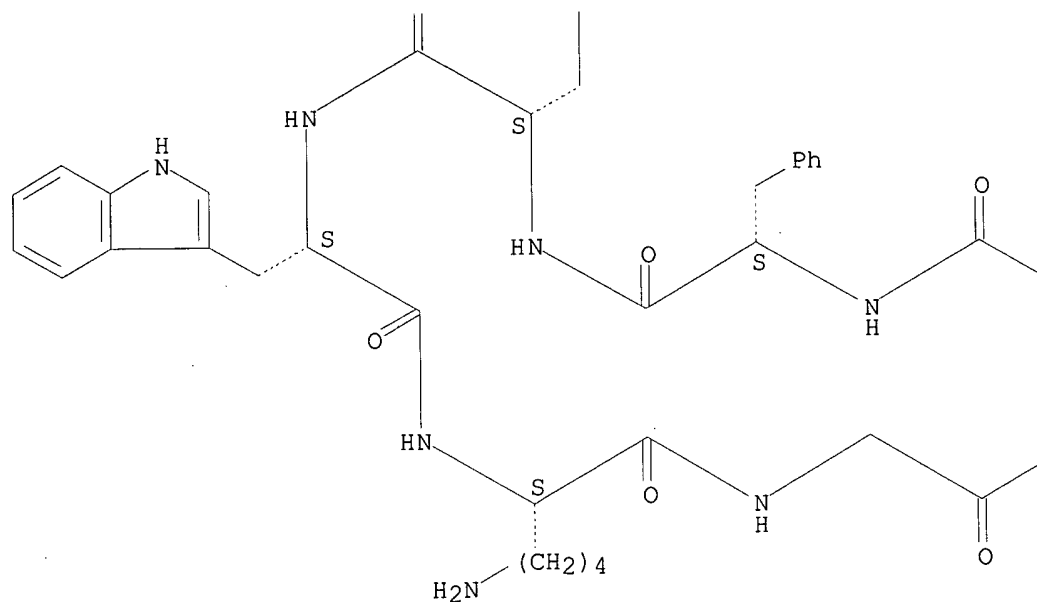
SEQ 1 AGCKNFYWKG FTSC

Absolute stereochemistry.

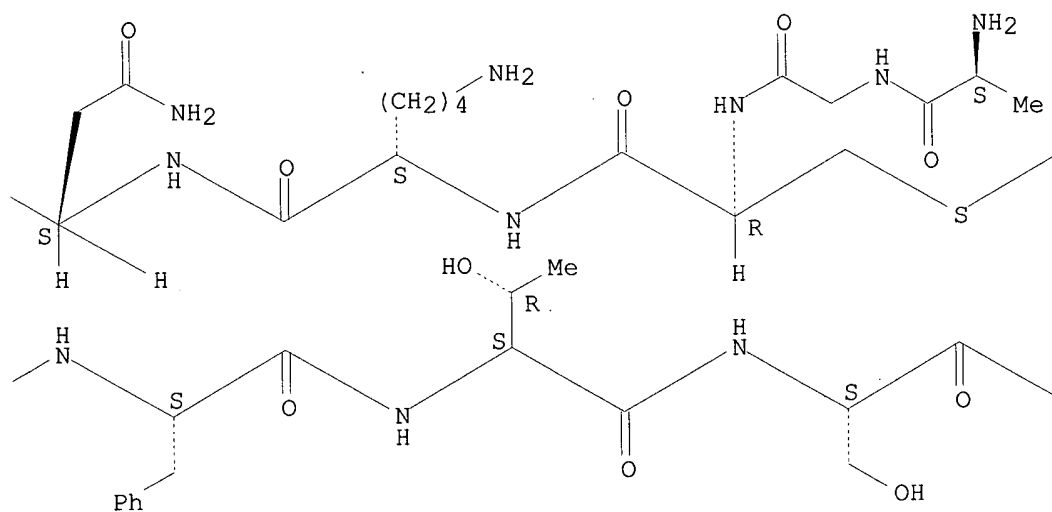
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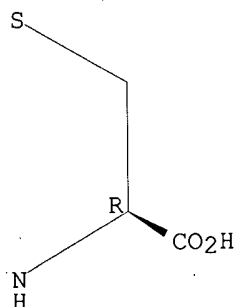


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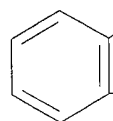
L20 ANSWER 14 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1980:580017 HCAPLUS  
 DOCUMENT NUMBER: 93:180017  
 TITLE: Non-reducible cyclic, and azaphenylalanyl6 analogs of somatostatin  
 AUTHOR(S): Hirst, B. H.; Reed, J. D.; Shaw, B.; Hayward, C. F.; Morley, J. S.  
 CORPORATE SOURCE: Med. Sch., Univ. Newcastle upon Tyne, Newcastle upon Tyne, NE1 7RU, UK  
 SOURCE: European Journal of Pharmacology (1980), 65(2-3), 151-6  
 CODEN: EJPHAZ; ISSN: 0014-2999  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Seven new analogs of somatostatin (I) [38916-34-6] are described, along with the effects of these analogs on pentagastrin [5534-95-2]-stimulated gastric acid and pepsin [9001-75-6] secretion in conscious cats. Replacement of the cystine disulfide bridge of I with an amide bridge, with or without deletion of the N-terminal dipeptide, resulted in analogs with .apprx.20% of the potency of I. Simultaneous omission of the 4-lysine residue in the amide-bridged analogs reduced the activity of the peptides to .apprx.5% of I. Substitution for 6-phenylalanine of I or an amide-bridged analog with azaphenylalanyl resulted in peptides with no detectable activity. The basic side-chain of 4-lysine is apparently important for the activity of I. The lack of activity of 6-azaphenylalanyl analogs of I demonstrate the extreme importance of the orientation of the side-chain of the 6-phenylalanine residue for the activity of I.  
 IT **75240-29-8**  
 RL: BIOL (Biological study)  
 (stomach secretion inhibition by, structure in relation to)  
 IT **75240-29-8**  
 RL: BIOL (Biological study)  
 (stomach secretion inhibition by, structure in relation to)  
 RN 75240-29-8 HCAPLUS  
 CN 5-14-Somatostatin (sheep reduced); N2-(6-amino-1-oxohexyl)-14-L-aspartic acid-, (144.fwdarw.5)-lactam (9CI) (CA INDEX NAME)



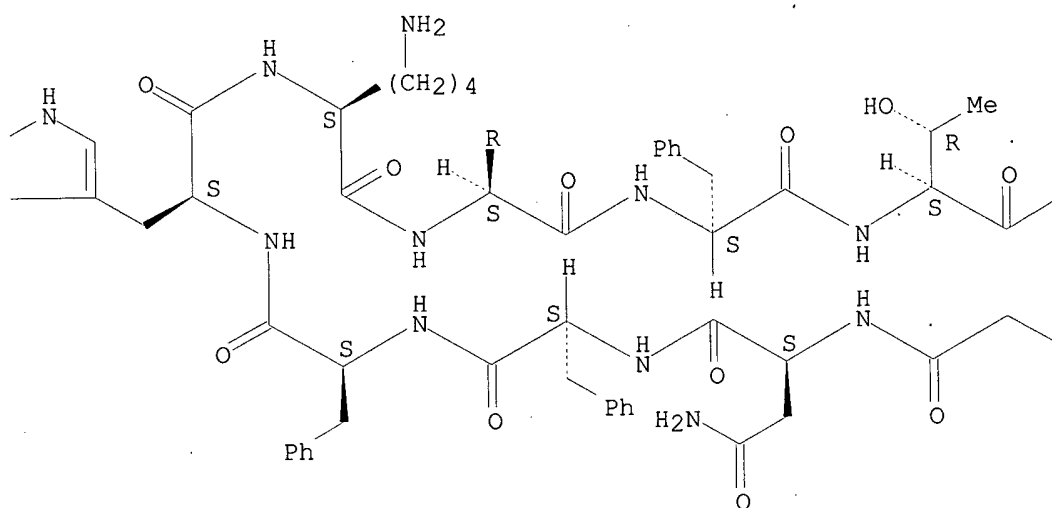
SEQ 1 XNFFWKTFST D

Absolute stereochemistry.

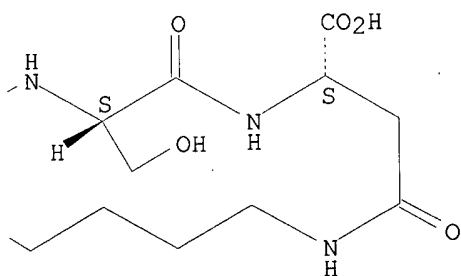
PAGE 1-A



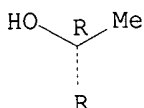
PAGE 1-B



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PAGE 2-A

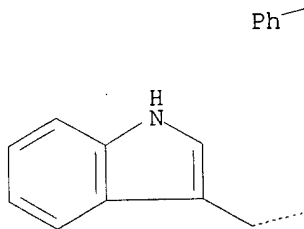


L20 ANSWER 15 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1979:763 HCAPLUS  
 DOCUMENT NUMBER: 90:763  
 TITLE: Inhibition of gastric acid secretion by stereoisomers of somatostatin  
 AUTHOR(S): Reed, J. D.; Hirst, B. H.; Gomez-Pan, A.; Coy, D. H.; Schally, A. V.; Meyers, C.  
 CORPORATE SOURCE: Med. Sch., Univ. Newcastle upon Tyne, Newcastle upon Tyne, UK  
 SOURCE: Metabolism, Clinical and Experimental (1978), 27(9, Suppl. 1), 1411-13  
 CODEN: METAJ; ISSN: 0026-0495  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The inhibition of gastric acid secretion in rats by cyclic somatostatin [38916-34-6] and 9 analogs was related to structure. D-Cys14-somatostatin [61425-92-1], Ala-D-Cys14-somatostatin [67374-97-4] had greater potency than cyclic somatostatin in this assay. The gastric acid secretion inhibition by D-Trp8-somatostatin [58976-46-8] equaled that of cyclic somatostatin. The greater acid secretion inhibitory potencies of 6 of the analogs were related to inhibitory potencies previously detd. in a growth hormone assay in rats in vitro and in insulin and glycogen assays in rats in vivo.  
 IT **68194-01-4**  
 RL: BIOL (Biological study)  
 (stomach acid secretion response to)  
 IT **68194-01-4**  
 RL: BIOL (Biological study)  
 (stomach acid secretion response to)  
 RN 68194-01-4 HCAPLUS  
 CN Somatostatin (sheep), 2-deglycine-3a-endo-glycine- (9CI) (CA INDEX NAME)

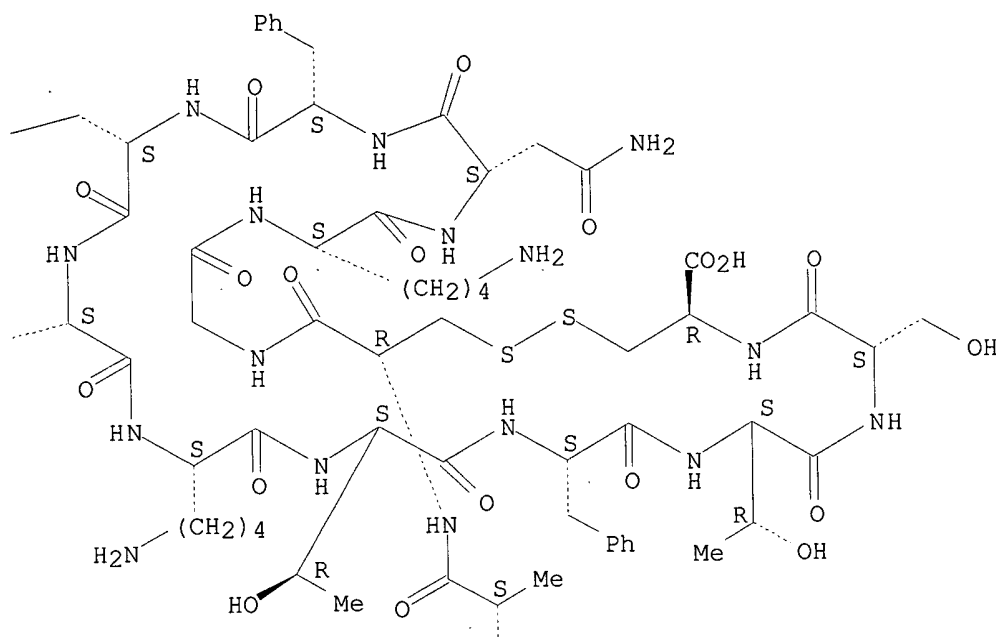
SEQ 1 ACGKNFFWKT FTSC

Absolute stereochemistry.

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PAGE 2-B

NH2

L20 ANSWER 16 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1979:762 HCAPLUS  
 DOCUMENT NUMBER: 90:762  
 TITLE: Observations on the growth hormone, insulin, and glucagon release-inhibiting activities of somatostatin analogs  
 AUTHOR(S): Coy, David H.; Meyers, Chester; Arimura, Akira; Schally, Andrew V.; Redding, Tommie W.  
 CORPORATE SOURCE: Dep. Med., Tulane Univ. Sch. Med., New Orleans, LA, USA  
 SOURCE: Metabolism, Clinical and Experimental (1978), 27(9, Suppl. 1), 1407-10  
 CODEN: METAAJ; ISSN: 0026-0495  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Somatostatin analogs were compared with somatostatin [38916-34-6] for their ability to inhibit the release of growth hormone [9002-72-6] from rat anterior pituitary cells and to inhibit arginine-stimulated glucagon [9007-92-5] and insulin [9004-10-8] release in rats. The growth hormone release inhibiting activities of D-Ala2, D-Trp8-somatostatin [65375-80-6] and D-Trp8-somatostatin [58976-46-8] were 20 and 5 times greater than that of somatostatin. Cys2-Gly3-somatostatin [68194-01-4] and Cys2-D-Ala3-somatostatin [68194-02-5] had .apprx.40% greater growth hormone release inhibiting activities than somatostatin but their duration of action was greater. D-Trp8-D-Cys14-somatostatin [61950-59-2] had 220% of the glucagon release inhibiting activity of somatostatin but only 10%

of the insulin release inhibiting activity. L-6-Fluoro-Trp8-somatostatin [67374-97-4] and L-fluoro-Trp8-somatostatin [66582-76-1] were equipotent and 4 times as active as somatostatin in inhibiting growth hormone release. The D-6-fluoro-Trp8 [67392-90-9] and D-5-fluoro-Trp8 [67392-91-0] analogs had 10 and 20-30-times the growth hormone release-inhibiting activity of somatostatin.

IT **68194-01-4**

RL: BIOL (Biological study)

(pancreatic and pituitary hormone release inhibition by)

IT **68194-01-4**

RL: BIOL (Biological study)

(pancreatic and pituitary hormone release inhibition by)

RN 68194-01-4 HCAPLUS

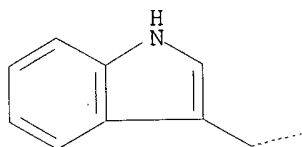
CN Somatostatin (sheep), 2-deglycine-3a-endo-glycine- (9CI) (CA INDEX NAME)

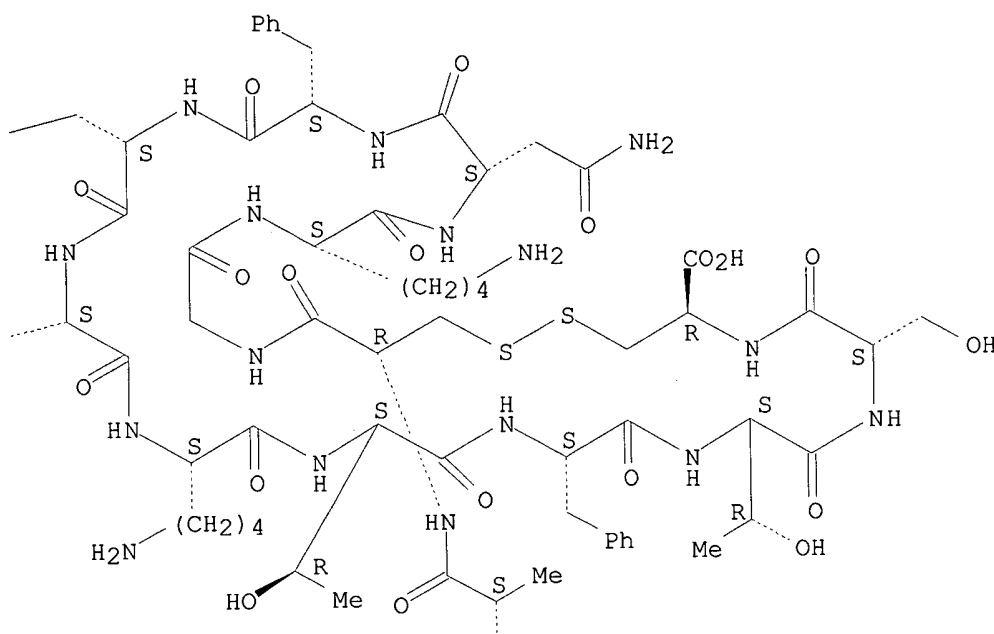
SEQ 1 ACGKNFFWKT FTSC

Absolute stereochemistry.

PAGE 1-A

Ph—





NH2

L20 ANSWER 17 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1978:406542 HCAPLUS

DOCUMENT NUMBER: 89:6542

TITLE: Synthesis of carbacyclic analogs of somatostatin by combination of conventional and solid-phase peptide synthesis methodology

AUTHOR(S): Sarantakis, D.; Teichman, J.

CORPORATE SOURCE: Res. Div., Wyeth Lab. Inc., Radnor, PA, USA

SOURCE: Pept., Proc. Am. Pept. Symp., 5th (1977), 186-8.

Editor(s): Goodman, Murray; Meienhofer, Johannes.  
Wiley: New York, N. Y.

CODEN: 370BAT

DOCUMENT TYPE: Conference

LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB Somatostatin analogs I and II were prepd. by the Merrifield synthesis of the appropriate peptides and cyclization by dicyclohexylcarbodiimide-hydroxybenzotriazole or azide methods.

IT 62361-29-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

IT 62361-29-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

RN 62361-29-9 HCAPLUS

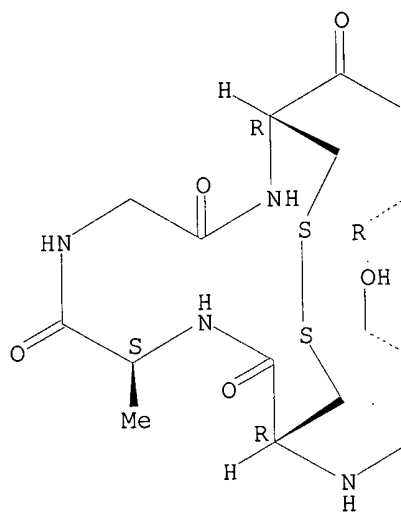
CN Somatostatin (sheep), cyclic (14.fwdarw.1)-peptide (9CI) (CA INDEX NAME)

NTE cyclic

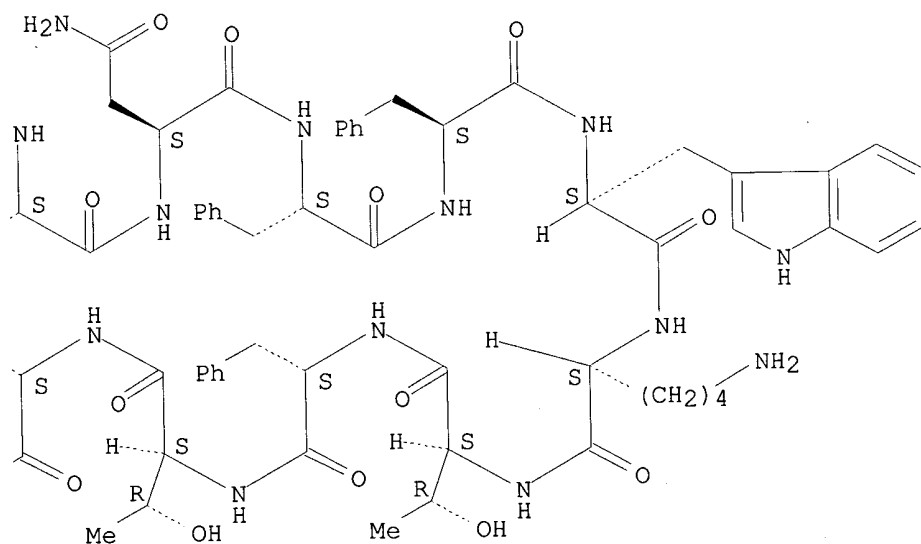
SEQ 1 AGCKNFFWKT FTSC

Absolute stereochemistry.

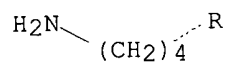
PAGE 1-C



PAGE 1-D



PAGE 2-A



L20 ANSWER 18 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1977:478718 HCAPLUS

DOCUMENT NUMBER: 87:78718

TITLE: A bicyclo-somatostatin analog, highly specific for the inhibition of growth hormone release

AUTHOR(S): Sarantakis, D.; Teichman, J.; Clark, D. E.; Lien, E. L.

CORPORATE SOURCE: Res. Div., Wyeth Lab., Philadelphia, PA, USA

SOURCE: Biochemical and Biophysical Research Communications (1977), 75(1), 143-8

CODEN: BBRCA9; ISSN: 0006-291X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A combination of conventional and solid phase peptide synthesis methods were used to prepare to a homodetic cyclic disulfide tetradecapeptide, Wy 40391 [62361-29-9]. The analog inhibited the release of growth hormone [9002-72-6] in vivo without affecting either insulin or glucagon secretion. A correlation between binding affinity to receptors and specificity is suggested. The specificity of Wy 40391 may be useful for the treatment of growth hormone hypersecretion in humans.

IT 62361-29-9P 63700-75-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and growth hormone release inhibition by)

IT 62361-29-9P 63700-75-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and growth hormone release inhibition by)

RN 62361-29-9 HCAPLUS

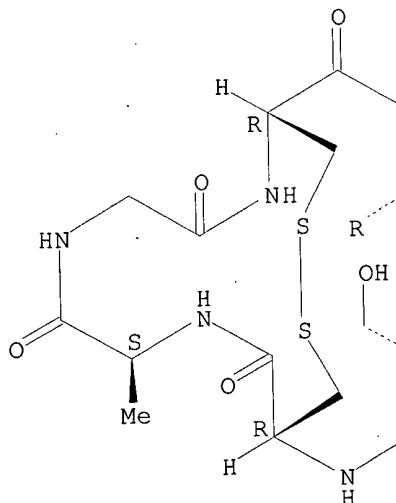
CN Somatostatin (sheep), cyclic (14.fwdarw.1)-peptide (9CI) (CA INDEX NAME)

NTE cyclic

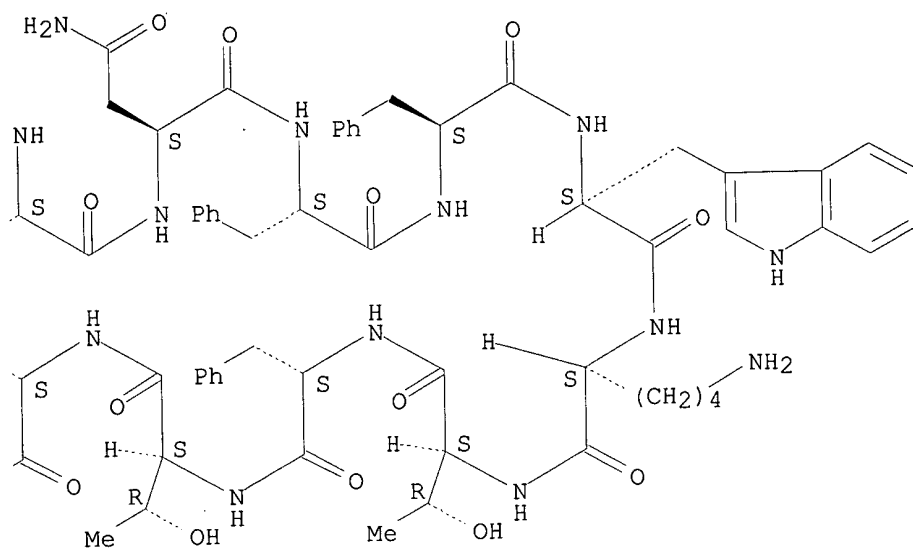
SEQ 1 AGCKNFFWKT FTSC

Absolute stereochemistry.

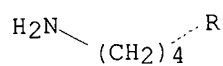
PAGE 1-C



PAGE 1-D



PAGE 2-A



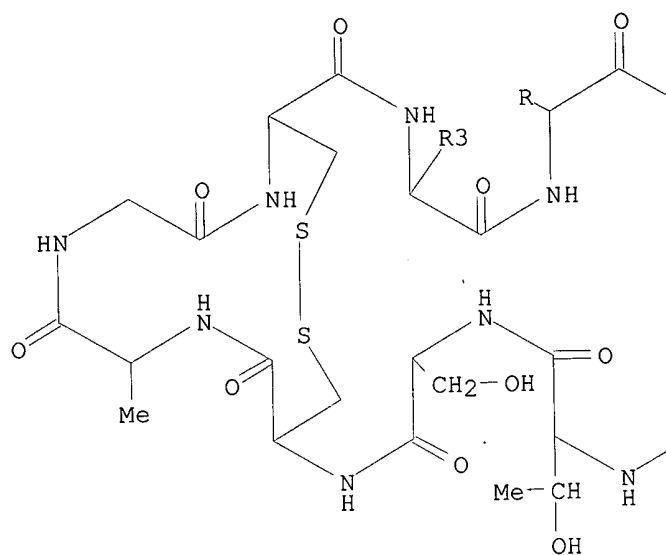
RN 63700-75-4 HCAPLUS  
 CN Somatostatin (sheep), 8-D-tryptophan-, cyclic (14.fwdarw.1)-peptide (9CI)  
 (CA INDEX NAME)

NTE cyclic

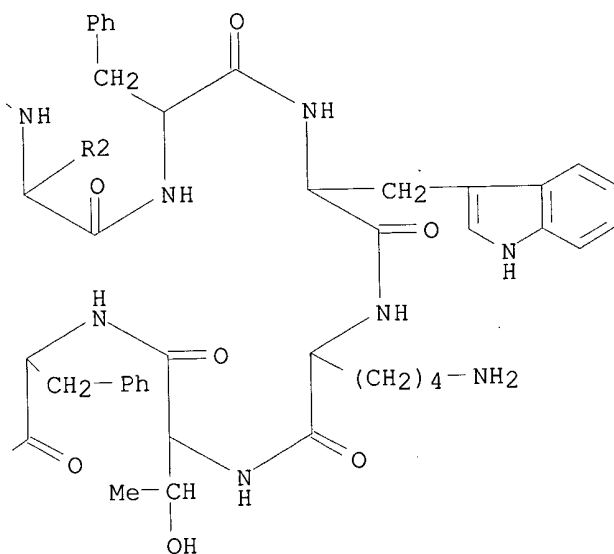
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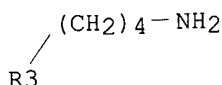
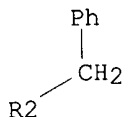
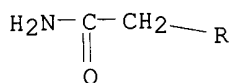


PAGE 1-C



PAGE 1-D





L20 ANSWER 19 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1977:155983 HCAPLUS  
 DOCUMENT NUMBER: 86:155983  
 TITLE: Cyclic somatostatin disulfide analogues  
 INVENTOR(S): Sarantakis, Dimitrios  
 PATENT ASSIGNEE(S): American Home Products Corp., USA  
 SOURCE: U.S., 6 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3997517	A	19761214	US 1976-653685	19760130
PRIORITY APPLN. INFO.:			US 1976-653685	19760130

GI For diagram(s), see printed CA Issue.

AB Cyclic somatostatin analog I was prepd. by the solid-phase method. Thus, Me<sub>3</sub>CO<sub>2</sub>C-Cys[CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>(OMe)-4]-Ala-Gly-Cys[CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>(OMe)-4]-Lys(CO<sub>2</sub>CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>Cl-2)-Asn-Phe-Phe-Trp-Lys(CO<sub>2</sub>CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>Cl-2)-Thr(CH<sub>2</sub>Ph)-Phe-Thr(CH<sub>2</sub>Ph)-Ser(CH<sub>2</sub>Ph)-resin was prepd. and cleaved with NH<sub>2</sub>NH<sub>2</sub> to give the fully protected peptide hydrazide. The Me<sub>3</sub>CO<sub>2</sub>C group was cleaved from the latter with CF<sub>3</sub>CO<sub>2</sub>H, and a cyclic peptide bond was formed by an azide coupling. All other blocking groups were cleaved from the cyclic peptide, and a disulfide bond was formed by air oxidn. to give I. The s.c. administration of 3 mg/kg of I to Nembutal-treated rats decreased the blood serum levels of growth hormone (GH) to 40 ng/ml, whereas Nembutal-treated rats which were not given I had GH serum levels of 291 ng/ml. I at 3 mg/kg did not affect the insulin and glucagon serum levels in rats.

IT **62361-29-9P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and growth hormone release inhibition by)

IT **62361-29-9P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and growth hormone release inhibition by)

RN 62361-29-9 HCAPLUS

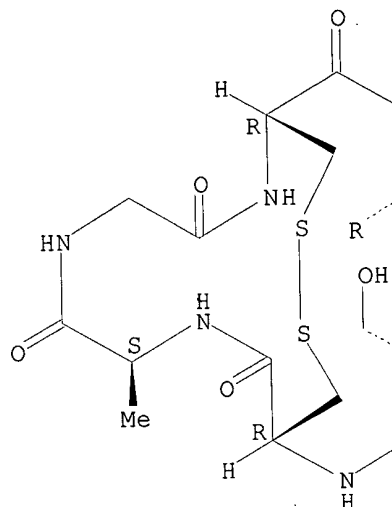
CN Somatostatin (sheep), cyclic (14.fwdarw.1)-peptide (9CI) (CA INDEX NAME)

NTE cyclic

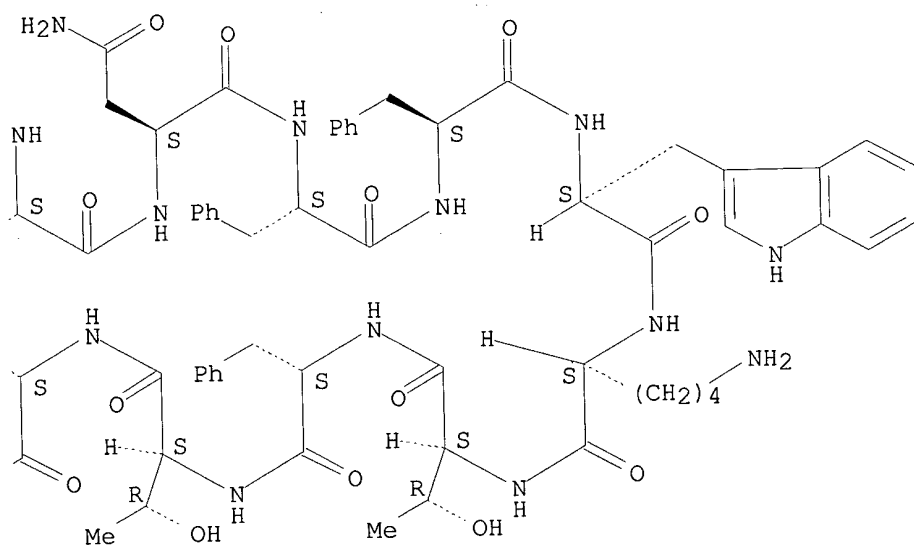
SEQ 1 AGCKNFFWKT FTSC

Absolute stereochemistry.

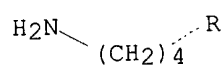
PAGE 1-C



PAGE 1-D



PAGE 2-A



ACCESSION NUMBER: 1977:140469 HCAPLUS  
 DOCUMENT NUMBER: 86:140469  
 TITLE: Cyclic dodecapeptide derivatives of somatostatin and intermediates  
 INVENTOR(S): Garsky, Victor M.  
 PATENT ASSIGNEE(S): American Home Products Corp., USA  
 SOURCE: U.S., 11 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3988304	A	19761026	US 1975-607303	19750825
			US 1975-607303	19750825

PRIORITY APPLN. INFO.:  
 GI For diagram(s), see printed CA Issue.  
 AB The somatostatin analog I was prepd. for the treatment of diabetes mellitus and acromegaly. Thus, Me3CO2CZNH(CH2)3CO-Lys(ZCl)-Asn-Phe-Phe-Trp-Lys(ZCl)-Phe-Thr(CH2Ph)-Phe-Thr(CH2Ph)-Ser(CH2Ph)-resin (ZCl = CO2CH2C6H4Cl-2) was prepd. by the solid-phase method and cleaved with NH2NH2 to give the protected peptide hydrazide. This hydrazide was coupled to H-Asp(OCMe3)-OCH2Ph and treated with CF3CO2H to give H2N(CH2)3CO-Lys(ZCl)-Asn-Phe-Phe-Trp-Lys(ZCl)-Phe-Thr(CH2Ph)-Phe-Thr(CH2Ph)-Ser(CH2Ph)-Asp-OCH2Ph. The latter was cyclized with dicyclohexylcarbodiimide and deblocked with HF to give I. I at 1 mg/kg s.c. decreased the blood serum growth hormone (GH) to 39 ng/ml after 15 min in nembutal-treated rats versus a blood serum GH level of 169 ng/ml without I.  
 IT **62459-76-1P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and growth hormone release inhibition by)  
 IT **62459-76-1P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and growth hormone release inhibition by)  
 RN 62459-76-1 HCAPLUS  
 CN Somatostatin (sheep reduced), 1-de-L-alanine-2-deglycine-3-de-L-cysteine-4-[N2-(4-amino-1-oxobutyl)-L-lysine]-14-L-aspartic acid-, cyclic (14.fwdarw.4)-peptide, diacetate (salt) (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 XKNFFWKTFST SD

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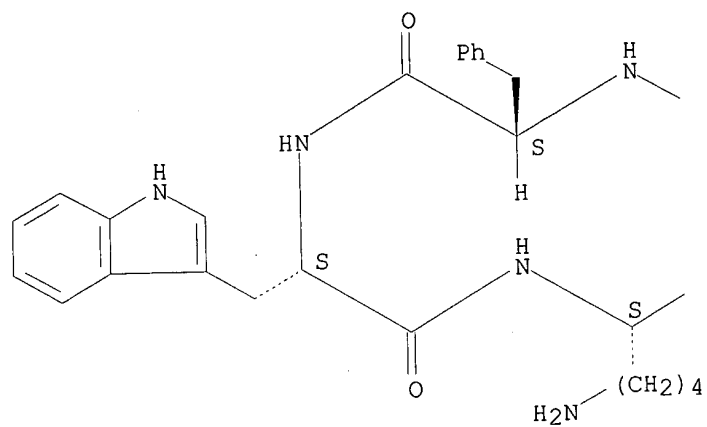
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CMF C73 H98 N16 O18

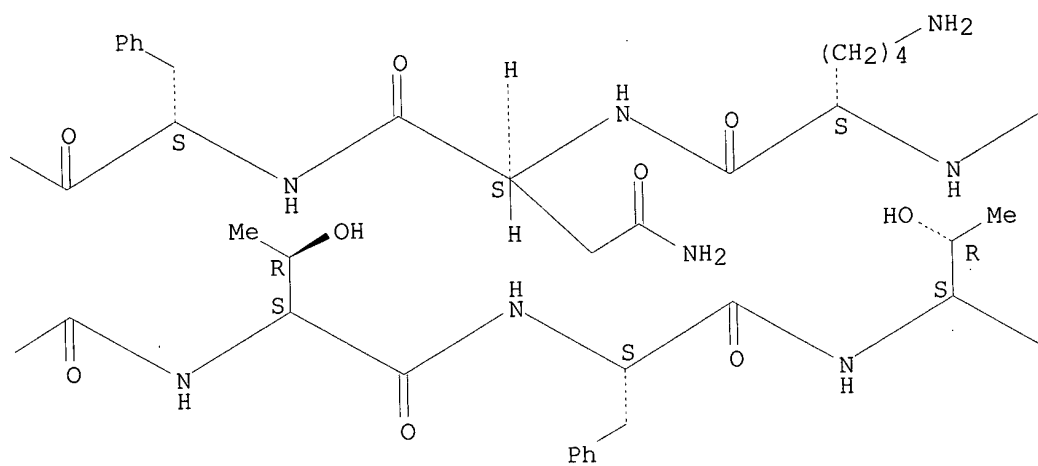
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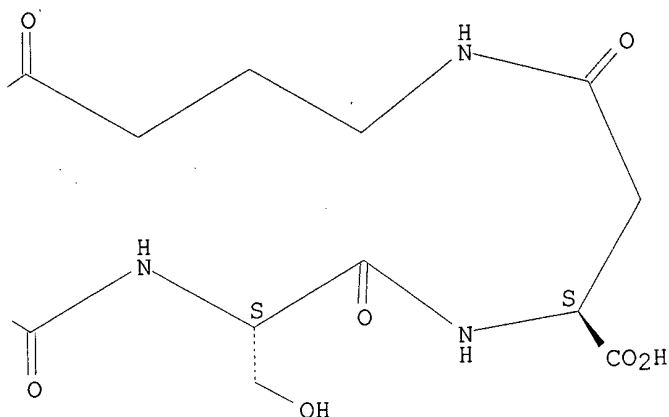
Absolute stereochemistry.

PAGE 1-A



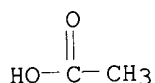
PAGE 1-B





CM 2

CRN 64-19-7  
CMF C2 H4 O2



L20 ANSWER 21 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1977:101222 HCAPLUS

DOCUMENT NUMBER: 86:101222

TITLE: Synthesis of a nonreducible cyclic analog of  
somatostatin having only growth hormone release  
inhibiting activity

AUTHOR(S): Garsky, V. M.; Clark, D. E.; Grant, N. H.

CORPORATE SOURCE: Res. Div., Wyeth Lab., Philadelphia, PA, USA

SOURCE: Biochemical and Biophysical Research Communications  
(1976), 73(4), 911-16

CODEN: BBRC9; ISSN: 0006-291X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A nonreducible analog of somatostatin cyclic [1-deAla,2-deGly,3.gamma.-aminobutyrate,14-Asp]somatostatin (I) [60964-99-0] was prepd. by a combination of solid phase and soln. peptide synthesis. In rats, I significantly suppressed pentobarbital-stimulated growth hormone [9002-72-6] release but had no effect on arginine-stimulated glucagon or insulin release. The linear form, NH2-.gamma.-Abu-Lys-Asn-Phe-Phe-Trp-Lys-Thr-Phe-Thr-Ser-Asp-OH [61864-13-9], was also prepd. and tested in vitro. It had only slight activity.

IT 60964-99-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and growth hormone release-inhibiting activity of)

IT 60964-99-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and growth hormone release-inhibiting activity of)

RN 60964-99-0 HCAPLUS

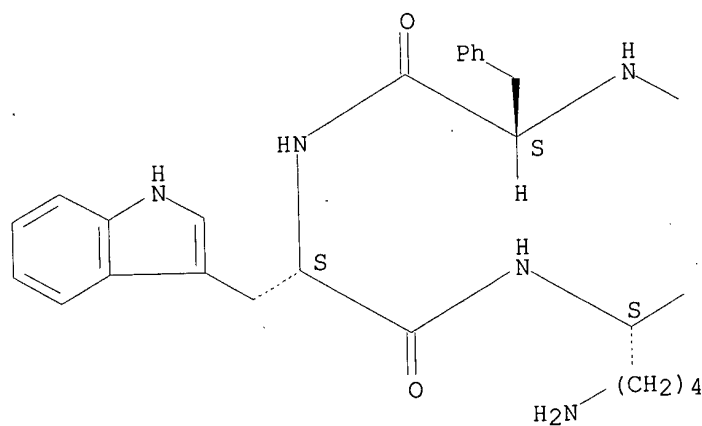
CN Somatostatin (sheep reduced), 1-de-L-alanine-2-deglycine-3-de-L-cysteine-4-

[N2-(4-amino-1-oxobutyl)-L-lysine]-14-L-aspartic acid-, cyclic  
(14.fwdarw.4)-peptide (9CI) (CA INDEX NAME)

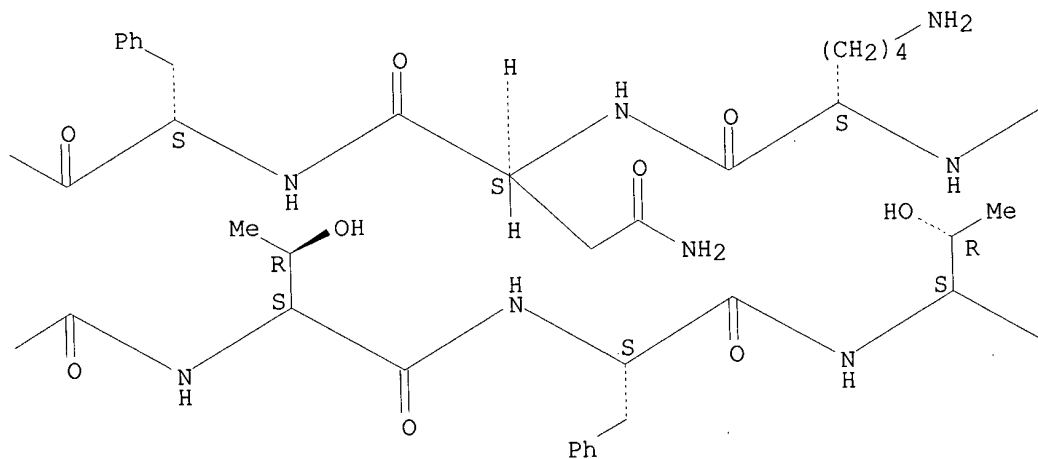
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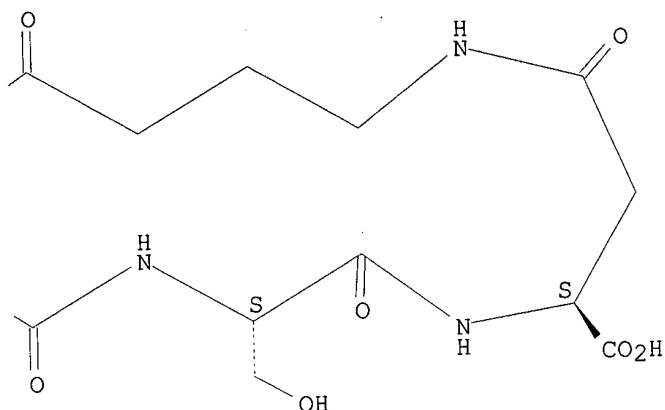
Absolute stereochemistry.

PAGE 1-A



PAGE 1-B





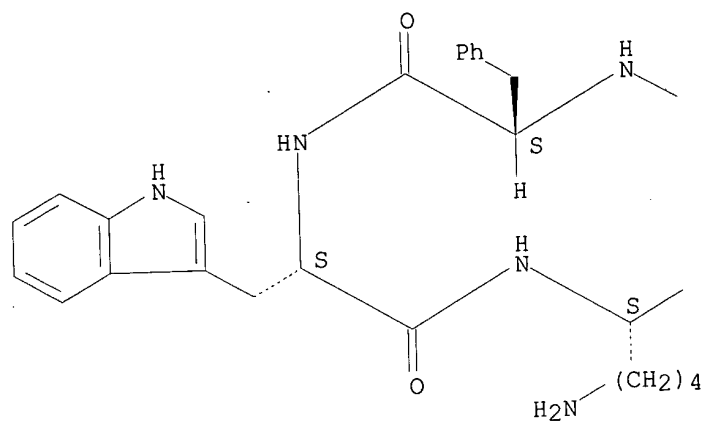
L20 ANSWER 22 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1977:65953 HCAPLUS  
 DOCUMENT NUMBER: 86:65953  
 TITLE: Dissociation of somatostatin effects. Peptides inhibiting the release of growth hormone but not glucagon or insulin in rats  
 AUTHOR(S): Grant, Norman; Clark, Donald; Garsky, Victor; Jaunakais, Ivars; McGregor, William; Sarantakis, Dimitrios  
 CORPORATE SOURCE: Res. Div., Wyeth Lab., Philadelphia, PA, USA  
 SOURCE: Life Sciences (1976), 19(5), 629-31  
 CODEN: LIFSAK; ISSN: 0024-3205  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI For diagram(s), see printed CA Issue.  
 AB Na pentobarbital [57-33-0]-stimulated growth hormone [9002-72-6] release in rats was inhibited by the cyclic somatostatin analogs, Wy 19840 (I) and Wy 40056 (II) [60964-99-0]. Arginine [74-79-3]-stimulated glucagon [9007-92-5] or insulin [9004-10-8] release was unaffected by both analogs. Cyclic somatostatin [38916-34-6] was more potent than either analog in inhibiting hormone secretion.  
 IT 60964-99-0  
 RL: BIOL (Biological study)  
 (growth hormone release selective inhibition by)  
 IT 60964-99-0  
 RL: BIOL (Biological study)  
 (growth hormone release selective inhibition by)  
 RN 60964-99-0 HCAPLUS  
 CN Somatostatin (sheep reduced), 1-de-L-alanine-2-deglycine-3-de-L-cysteine-4-[N2-(4-amino-1-oxobutyl)-L-lysine]-14-L-aspartic acid-, cyclic (14.fwdarw.4)-peptide (9CI) (CA INDEX NAME)

SEQ 1 XKNFFWKTFST SD

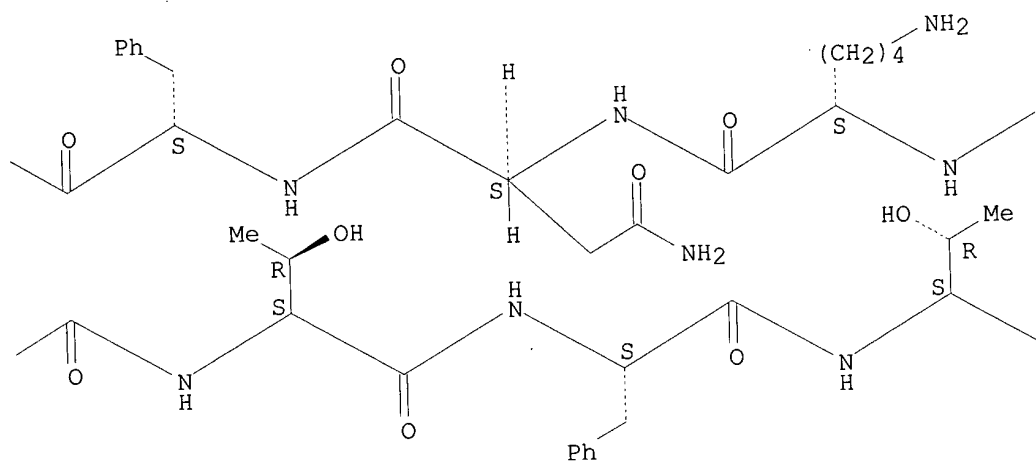
Absolute stereochemistry.

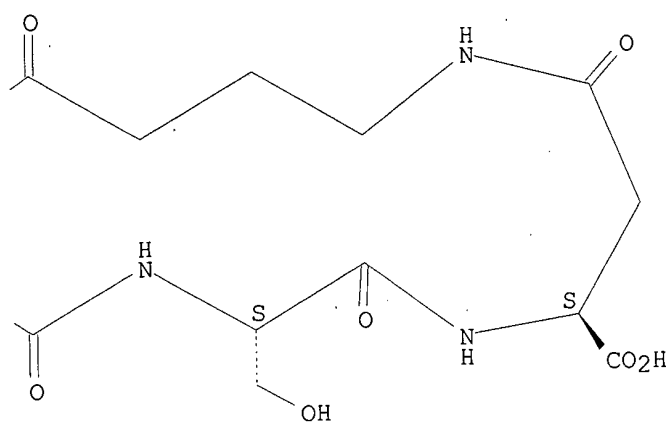


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 FILE LAST UPDATED: 21 Jul 2003 (20030721/ED)

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 DEFAULT MLEVEL IS ATOM  
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STEREO ATTRIBUTES: NONE  
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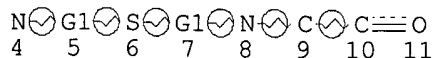
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 4 5 6 7 8 9 10 11 12

REP G1=(1-5) CH2  
 NODE ATTRIBUTES:  
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 DEFAULT MLEVEL IS ATOM  
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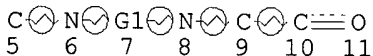
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STEREO ATTRIBUTES: NONE

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NSPEC IS R AT 10

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

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STEREO ATTRIBUTES: NONE

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L16 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1979:508235 HCAPLUS

DOCUMENT NUMBER: 91:108235

TITLE: Aminoethylglycine containing polypeptides

INVENTOR(S): Dairman, Wallace M.; Felix, Arthur M.; Gallo-Torres, Hugo E.; Heimer, Edgar P.; Meienhofer, Johannes A.

PATENT ASSIGNEE(S): Hoffmann-La Roche, Inc., USA

SOURCE: U.S., 18 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

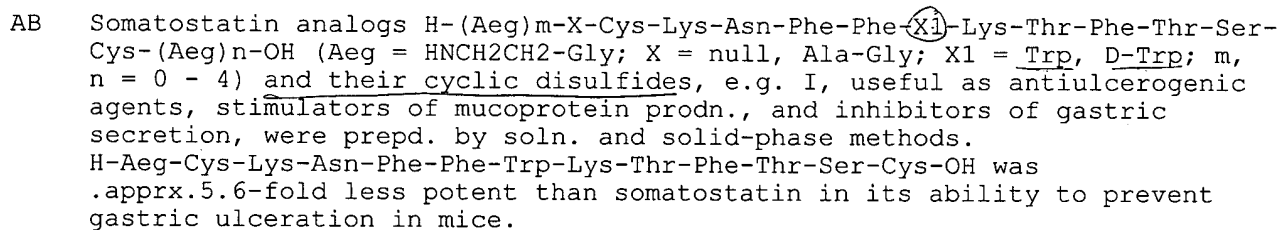
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4145337	A	19790320	US 1977-840922	19771011
EP 1449	A2	19790418	EP 1978-101073	19781005
EP 1449	A3	19790627		
EP 1449	B1	19810415		

$\theta$   
 $> 4-6$   
non-cyclized

GI



RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

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STRUCTURE FILE UPDATES:    21 JUL 2003  HIGHEST RN 552272-14-7
DICTIONARY FILE UPDATES:  21 JUL 2003  HIGHEST RN 552272-14-7
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TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

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Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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L15 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 70889-71-3 REGISTRY  
CN Somatostatin (sheep reduced), 1-de-L-alanine-2-[N-(2-aminoethyl)glycine]-3-  
de-L-cysteine-14-de-L-cysteine-, cyclic (13.fwdarw.2)-peptide (9CI) (CA

INDEX NAME)

OTHER CA INDEX NAMES:

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FS PROTEIN SEQUENCE; STEREOSEARCH

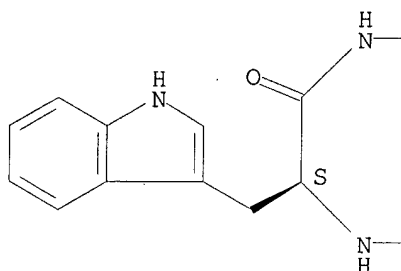
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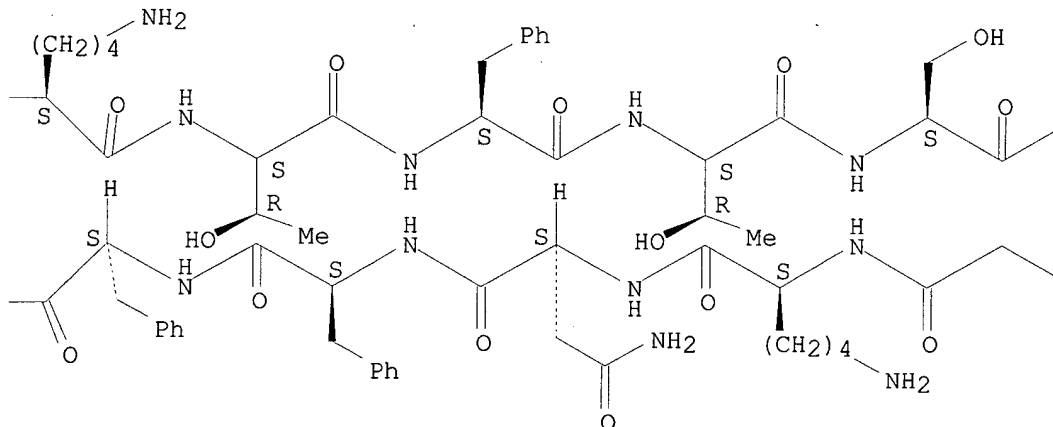
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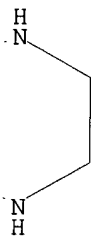
Absolute stereochemistry.

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1 REFERENCES IN FILE CA (1947 TO DATE)  
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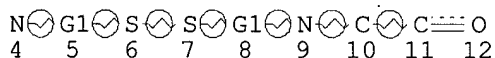
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 FILE LAST UPDATED: 21 Jul 2003 (20030721/ED)

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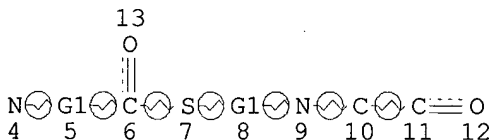
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REP G1=(1-5) CH2  
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 NSPEC IS R AT 4  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE  
 L11 STR



REP G1=(1-5) CH2  
 NODE ATTRIBUTES:  
 NSPEC IS R AT 4  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 10



STEREO ATTRIBUTES: NONE

L12 STR

$\text{N} \text{---} \text{G1} \text{---} \text{S} \text{---} \text{G1} \text{---} \text{N} \text{---} \text{C} \text{---} \text{C} \text{---} \text{O}$   
 4 5 6 7 8 9 10 11

REP G1=(1-5) CH2

NODE ATTRIBUTES:

NSPEC IS R AT 4

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE

L18 49 SEA FILE=REGISTRY SSS FUL L10 OR L11 OR L12

L19 25 SEA FILE=HCAPLUS ABB=ON PLU=ON L18

=&gt;

=&gt;

=&gt; d ibib abs hitrn l19 1-25

L19 ANSWER 1 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2003:144141 HCAPLUS

DOCUMENT NUMBER: 139:30973

TITLE: A frame shifted disulfide bridged analogue of angiotensin II

AUTHOR(S): Schmidt, Boris; Kuhn, Christian; Ehlert, Dennis K.; Lindeberg, Gunnar; Lindman, Susanna; Karlen, Anders; Hallberg, Anders

CORPORATE SOURCE: TU Darmstadt, Institut for Organic Chemistry, Darmstadt, D-64287, Germany

SOURCE: Bioorganic &amp; Medicinal Chemistry (2003), 11(6), 985-990

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB N-(2-Mercaptoethyl)glycine [NMgly] was incorporated into the 3 and 5 positions of angiotensin II and oxidized to give the corresponding cyclized disulfide c[NMgly3,5]Ang II. The binding affinity to the angiotensin II receptor (AT1) of this conformationally constrained analog, which is related to the potent Ang II agonist c[Hcy3,5]Ang II, was examd. The analog had no affinity to the AT1 receptor. Theor. conformational anal. was performed to compare the conformational characteristics of model compds. of c[Hcy3,5]Ang II and the frame shifted analog c[NMgly3,5]Ang II to explain the lack of affinity.

IT 543739-94-2P

RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(angiotensin frame shifted disulfide bridged analog receptor binding in relation in relation to structure)

IT 543739-97-5

RL: PRP (Properties)

(angiotensin frame shifted disulfide bridged analog receptor binding in relation in relation to structure)

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 2 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:692513 HCAPLUS

DOCUMENT NUMBER: 138:117735

TITLE: Human somatostatin receptor specificity of backbone-cyclic analogs containing novel sulfur building units

AUTHOR(S): Gazal, Sharon; Gellerman, Gary; Ziv, Ofer; Karpov, Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michel; Gilon, Chaim

CORPORATE SOURCE: Department of Organic Chemistry, Hebrew University, Jerusalem, 91904, Israel

SOURCE: Peptides: The Wave of the Future, Proceedings of the Second International and the Seventeenth American Peptide Symposium, San Diego, CA, United States, June 9-14, 2001 (2001), 626-627. Editor(s): Lebl, Michal; Houghten, Richard A. American Peptide Society: San Diego, Calif.

CODEN: 69DBAL; ISBN: 0-9715560-0-8

DOCUMENT TYPE: Conference

LANGUAGE: English

AB The synthesis and the biol. properties of novel disulfide bridged backbone cyclic somatostatin analogs were examd. These analogs were prepd. to investigate the influence of the ring size and ring chem. on the binding profile of a parent analog named PTR 3173. PTR 3173 is 1000-fold more potent in the in vivo inhibition of growth hormone (GH) than of glucagon and 10,000-fold more potent inhibitor of GH than of insulin release. This pharmacol. property is ascribed to the unique binding profile of PTR 3173 and it was suggested that the binding to a specific combination of somatostatin receptors and not a single receptor detcs. the physiol. properties of the SST analog. Studies of binding of PTP 73 disulfide-bridged, backbone cyclic analogs to SSTR receptors suggest the effect of ring chem., ring size, and ring position of the peptide template on receptor binding selectivity. The disulfide analogs of PTR 3173 were also highly resistant to a broad spectrum of proteolytic activity compared to somatostatin that was degraded within a few minutes.

IT 252845-45-7, PTR 3213 252845-47-9, PTR 3219

252845-48-0, PTR 3221

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(somatostatin receptor specificity of backbone-cyclic analogs contg. novel sulfur building units)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 3 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:332670 HCAPLUS

DOCUMENT NUMBER: 136:341003

TITLE: Preparation of conformationally constrained backbone cyclized somatostatin analogs

INVENTOR(S): Hornik, Vered; Afargan, Michel M.; Gellerman, Gary

PATENT ASSIGNEE(S): Israel

SOURCE: U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of Appl. No. PCT/IL99/00329.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 10

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002052315	A1	20020502	US 2000-734583	20001213
US 6051554	A	20000418	US 1998-100360	19980619

US 6355613 B1 20020312 US 1998-203389 19981202  
 WO 9965508 A1 19991223 WO 1999-IL329 19990615

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,  
 DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,  
 JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,  
 MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,  
 TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,  
 MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,  
 ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
 CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

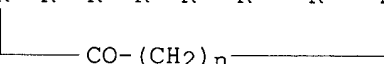
## PRIORITY APPLN. INFO.:

US 1998-100360 A2 19980619  
 US 1998-203389 A2 19981202  
 WO 1999-IL329 A2 19990615  
 US 1995-488159 A2 19950607  
 US 1995-569042 A2 19951207  
 US 1996-690609 A2 19960731

## OTHER SOURCE(S):

MARPAT 136:341003

GI

Q-R<sup>5</sup>-R<sup>6</sup>-R<sup>7</sup>-R<sup>8</sup>-R<sup>9</sup>-R<sup>10</sup>-R<sup>11</sup>-NR<sup>12</sup>-X


CO-(CH<sub>2</sub>)<sub>n</sub>

I

Appl.

AB Novel peptides, e.g., I [n = 1-5; X designates a terminal carboxy acid, amide or alc. group; Q is H or a mono- or disaccharide; R<sup>5</sup> is .gamma.-aminobutyric acid, diaminobutyric acid, Gly, .beta.-Ala, 5-aminopentanoic acid, or aminohexanoic acid; R<sup>6</sup> is D- or L-Phe or Tyr; R<sup>7</sup> is D- or L-Trp, -Phe, -1-Nal (1-naphthalenealanine) or -2-Nal, or Tyr; R<sup>8</sup> is D- or L-Trp; R<sup>9</sup> is D- or L-Lys; R<sup>10</sup> is Thr, Gly, Abu (2-aminobutanoic acid), Cys, Val, D- or L-Ala or -Phe; R<sup>11</sup> is D- or L-Phe, -Ala, Nle, or Cys; R<sup>12</sup> is Gly, Val, Leu, D- or L-Phe or 1Nal or 2Nal], are disclosed which are conformationally constrained backbone cyclized somatostatin analogs having somatostatin receptor sub-type selectivity. Thus, Phe(C3)-Cys\*-Phe-D-Trp-Lys-Thr-Cys\*-Phe-Phe(N3)-OH (PTR 3205), where one bridge connects the two building units (Phe-C3 and Phe N3, which are phenylalanine modified with carboxy or amine and a three carbon methylene spacer) and the second is a disulfide bridge formed between the two Cys residues, was prepd. by the solid-phase method and showed IC<sub>50</sub> = 10<sup>-6</sup> nM for inhibition of SRIF binding to transmembranal somatostatin receptors SST-R1, SST-R3 and SST-R5.

IT 252845-45-7P, PTR 3213 252845-47-9P, PTR 3219  
 252845-48-0P, PTR 3221

RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of conformationally constrained backbone cyclized somatostatin analogs)

L19 ANSWER 4 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:197431 HCAPLUS

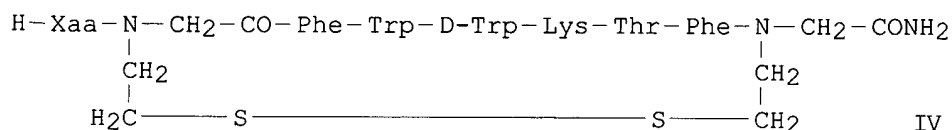
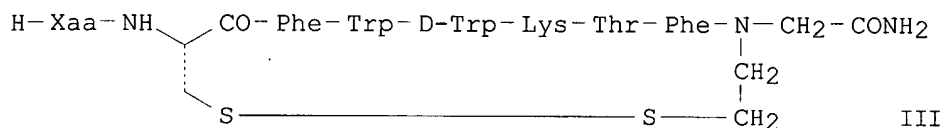
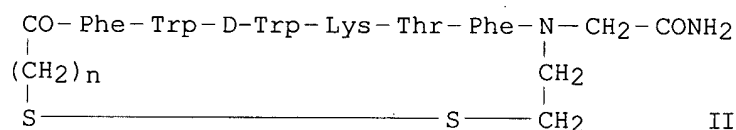
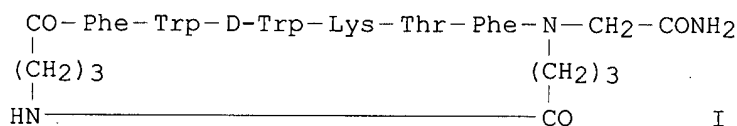
DOCUMENT NUMBER: 136:386384

TITLE: Human Somatostatin Receptor Specificity of  
 Backbone-Cyclic Analogues Containing Novel Sulfur  
 Building Units

AUTHOR(S): Gazal, Sharon; Gelerman, Garry; Ziv, Ofer; Karpov,  
 Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michel;  
 Gilon, Chaim

CORPORATE SOURCE: Department of Organic Chemistry, Hebrew University,

SOURCE: Jerusalem, 91904, Israel  
Journal of Medicinal Chemistry (2002), 45(8),  
1665-1671  
CODEN: JMCMAR; ISSN: 0022-2623  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



AB Somatostatin-14 (somatostatin) and its clin. available analogs (octreotide, lanreotide and vapreotide) are potent inhibitors of growth hormone, insulin, and glucagon release. Recently, the synthesis of PTR-3173 (I), a novel cyclic somatostatin analog with in vivo endocrine selectivity, was described. I exhibited high affinity to human recombinant somatostatin receptors (hsst) hsst2, hsst4 and hsst5. Its novel binding profile included potent in vivo inhibition of growth hormone but not of insulin release. Here, the synthesis, bioactivity, and structure-activity relationship studies of peptides II ( $n = 1, 2$ ), III (Xaa = nil, D-Phe) and IV (Xaa = nil, D-Phe, D-Nal) are reported and compared to those of I. In II-IV, the lactam bridge of I was replaced by a backbone disulfide bridge. II-IV showed significant metabolic stability as tested in various enzyme mixts. The receptor binding assays for II-IV revealed that their selectivity had increased towards hsst2 and hsst5, but decreased towards hsst4 in comparison to I. In addn., this work also described the synthesis of sulfur-contg. building units, such as  $\text{Acm-S-CH}_2\text{CH}_2\text{N}(\text{Fmoc})\text{CH}_2\text{CO}_2\text{H}$  (Acm = acetamidomethyl), for incorporation into peptides as groups capable of forming disulfide bridges..

IT 252845-45-7P 252845-47-9P 425428-86-0P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);

BIOL (Biological study); PREP (Preparation)

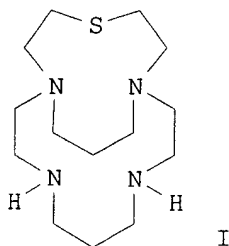
(prepn. and receptor-binding activity of disulfide-bridged somatostatin analogs)

REFERENCE COUNT:

25

THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 5 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 2001:642749 HCAPLUS  
 DOCUMENT NUMBER: 135:351981  
 TITLE: Synthesis and characterization of the pentadentate macrobicyclic ligand, 14-thia-1,4,8,11-tetraazabicyclo[9.5.3]nonadecane (L1) and its nickel(II) complexes. X-ray crystal structure of [Ni(L1)(ClO4)](ClO4).cntdot.2[Ni(L1)(OH2)](ClO4)2.cntdot.6H2O  
 AUTHOR(S): Coulter, Kevin R.; McAuley, Alexander; Rettig, Steven  
 CORPORATE SOURCE: Cominco Chemical Company, Trail, BC, V1R 3W0, Can.  
 SOURCE: Canadian Journal of Chemistry (2001), 79(5/6), 930-937  
 CODEN: CJCHAG; ISSN: 0008-4042  
 PUBLISHER: National Research Council of Canada  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



AB The pentadentate macrobicyclic, 14-thia-1,4,8,11-tetraazabicyclo[9.5.3]nonadecane (L1, I), was synthesized by high diln. cyclization of 1-thia-4,8-diazacyclododecane ([10]aneN2S, 2) with N,N'-bis(.alpha.-chloroacetamido)propane (3) and subsequent redn. of the di-oxo intermediate. The structure of the [Ni(L1)(ClO4)](ClO4).cntdot.2[Ni(L1)(OH2)](ClO4)2.cntdot.6H2O complex (monoclinic, P21/c, a 13.9261(4), b 30.279(2), c 17.1248(3) .ANG., .beta. 94.5065(3).degree.) at R = 0.039 (Rw = 0.034) for 911 parameters using 18,266 reflections with I > 3.sigma.I was detd. The ligand adopts a trans-III configuration. The Ni(II) ion is pseudooctahedral with Ni-S = 2.3896(10) .ANG. in [Ni(L1)(ClO4)]+ and 2.4193(10) .ANG., 2.4225(10) .ANG., in the two [Ni(L1)(H2O)]2+ cations. Both nickel(II) and nickel(III) complexes are six-coordinate in soln. Oxidn. of the [Ni(L1)(OH2)]2+ complex with K2S2O8 in aq. soln. yielded an ESR active Ni(III) species and the frozen soln. spectrum displayed axial symmetry with g = 2.159 and g = 2.024. In CH3CN, the [Ni(L1)(soln)]2+ complex showed two reversible redox waves corresponding to the Ni2+/+ couple at E1/2 = -1.807 V vs. Fc+/0 and Ni3+/2+ couple at E1/2 = 0.715 V vs. Fc+/0.

IT **371156-16-0P**, 14-Thia-1,4,8,11-tetraazabicyclo[9.5.3]nonadecane-3,9-dione  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (reactant for prepn. of nickel(II) perchlorato and aqua complexes of thiatetraazabicyclononadecane pentadentate macrobicyclic)

REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 6 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1999:811096 HCAPLUS  
 DOCUMENT NUMBER: 132:50250

TITLE: Preparation of conformationally constrained backbone cyclized somatostatin analogs  
 INVENTOR(S): Hornik, Vered; Afargan, Michel M.; Gellerman, Gary  
 PATENT ASSIGNEE(S): Peptor Ltd., Israel  
 SOURCE: PCT Int. Appl., 82 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 10  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9965508	A1	19991223	WO 1999-IL329	19990615
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6051554	A	20000418	US 1998-100360	19980619
US 6355613	B1	20020312	US 1998-203389	19981202
CA 2335488	AA	19991223	CA 1999-2335488	19990615
AU 9942884	A1	20000105	AU 1999-42884	19990615
AU 747515	B2	20020516		
EP 1085896	A1	20010328	EP 1999-957020	19990615
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
JP 2002518339	T2	20020625	JP 2000-554387	19990615
US 2002052315	A1	20020502	US 2000-734583	20001213
PRIORITY APPLN. INFO.:			US 1998-100360	A 19980619
			US 1998-203389	A 19981202
			US 1995-488159	A2 19950607
			US 1995-569042	A2 19951207
			US 1996-690609	A2 19960731
			WO 1999-IL329	W 19990615

OTHER SOURCE(S): MARPAT 132:50250  
 GI

Q-R5-R6-R7-R8-R9-R10-R11-NR12-X



AB Novel peptides, e.g., I [n = 1-5; X designates a terminal carboxy acid, amide or alc. group; Q is H or a mono- or disaccharide; R5 is .gamma.-aminobutyric acid, diaminobutyric acid, Gly, .beta.-Ala, 5-aminopentanoic acid, or aminohexanoic acid; R6 is D- or L-Phe or Tyr; R7 is D- or L-Trp, -Phe, -1-Nal (1-naphthalenealanine) or -2-Nal, or Tyr; R8 is D- or L-Trp; R9 is D- or L-Lys; R10 is Thr, Gly, Abu (2-aminobutanoic acid), Cys, Val, D- or L-Ala or -Phe; R11 is D- or L-Phe, -Ala, Nle, or Cys; R12 is Gly, Val, Leu, D- or L-Phe or 1Nal or 2Nal], are disclosed which are conformationally constrained backbone cyclized somatostatin analogs having somatostatin receptor sub-type selectivity. Thus, Phe(C3)-Cys\*-Phe-D-Trp-Lys-Thr-Cys\*-Phe-Phe(N3)-OH (PTR 3205), where one bridge connects the two building units (Phe-C3 and Phe N3, which are phenylalanine modified with carboxy or amine and a three carbon methylene

spacer) and the second is a disulfide bridge formed between the two Cys residues, was prep'd. by the solid-phase method and showed IC50 = 10<sup>-6</sup> nM for inhibition of SRIF binding to transmembranal somatostatin receptors SST-R1, SST-R3 and SST-R5.

IT 252845-45-7P, PTR 3213 252845-47-9P, PTR 3219  
252845-48-0P, PTR 3221

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of conformationally constrained backbone cyclized somatostatin analogs)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 7 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:520525 HCAPLUS

DOCUMENT NUMBER: 129:276287

TITLE: Cylindrical .beta.-Sheet Peptide Assemblies

AUTHOR(S): Clark, Thomas D.; Buriak, Jillian M.; Kobayashi, Kenji; Isler, Markus P.; McRee, Duncan E.; Ghadiri, M. Reza

CORPORATE SOURCE: Departments of Chemistry and Molecular Biology and the Skaggs Institute for Chemical Biology, The Scripps Research Institute, La Jolla, CA, 92037, USA

SOURCE: Journal of the American Chemical Society (1998), 120(35), 8949-8962

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Recent reports have shown that cyclic peptides composed of an even no. of alternating D- and L-amino acids can adopt flat, disklike conformations and stack through backbone-backbone hydrogen-bonding to form extended nanotubular structures. The present work details a general strategy for limiting this self-assembly process through backbone alkylation, giving rise to cylindrical .beta.-sheet peptide dimers. Scope and limitations of dimerization are exam'd. through NMR, FT-IR, mass spectral, and X-ray crystallog. studies of 20 cyclic peptides varying in ring size, location and identity of backbone alkyl substituents, and amino acid compn. The cyclic peptides are shown to self-assemble both in soln. and in the solid state through the expected antiparallel .beta.-sheet hydrogen-bonding network. While soln. dimerization by cyclic octapeptides appears general, peptides with alternative smaller or larger ring sizes fail to self-assoc. Formation of cylindrical .beta.-sheet ensembles is found to tolerate a no. of backbone N-alkyl substituents, including Me, allyl, Pr, and pent-4-en-1-yl groups, as well as a range of amino acid side chains. Within the hemi-N-methylated octapeptide framework, residues exhibit differential propensities for dimer stabilization, analogous to amino acid .beta.-sheet propensities in natural systems. Dimer-forming cyclic D,L-peptides are thus among the most structurally well characterized and synthetically accessible .beta.-sheet peptide model systems.

IT 213843-47-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(cylindrical .beta.-sheet peptide assemblies)

REFERENCE COUNT: 92 THERE ARE 92 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 8 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:381586 HCAPLUS

DOCUMENT NUMBER: 127:95584

TITLE: Synthesis and biological activity of novel backbone-bicyclic substance-P analogs containing lactam and disulfide bridges

AUTHOR(S): Bitan, Gal; Sukhotinsky, Inna; Mashriki, Yaffa;  
Hanani, Menachem; Selinger, Zvi; Gilon, Chaim  
CORPORATE SOURCE: Departments Org. and Biol. Chemistry, Hebrew Univ.  
Jerusalem, Jerusalem, 91904, Israel  
SOURCE: Journal of Peptide Research (1997), 49(5), 421-426  
CODEN: JPERFA; ISSN: 1397-002X  
PUBLISHER: Munksgaard  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB A biased library of 60 novel backbone-bicyclic Substance P analogs was  
prepd. by the simultaneous multiple peptide synthesis method. The  
peptides, contg. both a lactam and a disulfide ring, were synthesized by  
combined Boc and Fmoc chemistries, and were cyclized on the resin.  
Cleavage of the S-benzyl group and oxidn. of the sulfhydryl groups was  
enabled by adaptation of the diphenylsulfoxide-trichloromethylsilane  
method to solid-phase synthesis. The peptides were screened for NK-1 and  
NK-3 activity, and were found to be weak agonists.  
IT 192198-98-4 192199-00-1 192199-02-3  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
study, unclassified); PRP (Properties); BIOL (Biological study)  
(substance P analogs synthesis and biol. activity contg. lactam and  
disulfide bridges)

L19 ANSWER 9 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:578817 HCAPLUS  
DOCUMENT NUMBER: 125:266403  
TITLE: Backbone-to-backbone cyclized and linear pseudopeptide  
analogs of substance P as ligands to the substance P  
receptors from rat brain  
AUTHOR(S): Rivera-Baeza, C.; Kaljuste, K.; Uden, A.  
CORPORATE SOURCE: Dep. Neurochem. Neurotoxicol., Stockholm Univ.,  
Stockholm, Swed.  
SOURCE: Neuropeptides (Edinburgh) (1996), 30(4), 327-333  
CODEN: NRPPDD; ISSN: 0143-4179  
PUBLISHER: Churchill Livingstone  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Two series of backbone modified substance P analogs were synthesized. In  
the first group of analogs the N-terminal region of substance P, SP(1-4),  
was replaced by a polyamine segment or aliph. .omega.-amino fatty acid  
residues. Two of these analogs displaced 125I-Bolton-Hunter labeled  
substance P from rat brain synaptosomes with IC50 values of 1.3 and 1.6  
nM, resp. These affinities are similar to that of substance P (IC50 1.3  
nM). The second group of analogs were a set of backbone-to-backbone  
cyclized pseudopeptides. In these analogs two peptide bonds at the  
C-terminal portion of substance P were replaced by the reduced peptide  
bonds (.PSI.[CH2NH]) which were further reductively alkylated with  
3(4-methylbenzylthio)propanal. After cleavage from the resin the peptides  
were oxidized into a cyclic disulfide. All of the cyclic analogs of  
substance P interacted with the NK1 receptor from rat brain with IC50  
values in the micromolar range.

IT 182490-86-4P 182490-91-1P 182490-95-5P  
182490-98-8P 182491-01-6P 182491-04-9P  
182491-06-1P 182491-08-3P 182491-11-8P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL  
(Biological study); PREP (Preparation)  
(prepn. and binding of backbone-to-backbone cyclized and linear  
pseudopeptide analogs of substance P as ligands for tachykinin NK1  
receptors from rat brain)

L19 ANSWER 10 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1996:125916 HCAPLUS



DOCUMENT NUMBER: 124:248760  
 TITLE: Complexes of rhodium with  
 thiobis(ethylenenitrilo)tetraacetic acid; a potential  
 bifunctional chelate for use in radiotherapy  
 AUTHOR(S): Powell, Nigel A.; Hill, Angela M.; Levason, William;  
 Webster, Michael  
 CORPORATE SOURCE: Johnson Matthey Technology Centre, Reading, RG4 9NH,  
 UK  
 SOURCE: Journal of the Chemical Society, Dalton Transactions:  
 Inorganic Chemistry (1996), (4), 467-71  
 CODEN: JCDTBI; ISSN: 0300-9246  
 PUBLISHER: Royal Society of Chemistry  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Reaction of RhCl<sub>3</sub> with the potential bifunctional chelating agent  
 thiobis(ethylenenitrilo)tetraacetic acid (H<sub>4</sub>tedta) gave  
 [Rh(H<sub>3</sub>tedta)Cl<sub>2</sub>].cntdot.H<sub>2</sub>O. Both chloride ligands are readily lost on  
 refluxing in H<sub>2</sub>O, to give [Rh(Htedta)].cntdot.3H<sub>2</sub>O which was characterized  
 by an x-ray study. Further reaction with dil. HX (X = Cl, Br or I) led to  
 the monohalides [Rh(H<sub>2</sub>tedta)X].cntdot.nH<sub>2</sub>O shown by <sup>13</sup>C-{<sup>1</sup>H} NMR  
 spectroscopy to have halide trans to S. In contrast, thiocyanate is shown  
 to bind trans to N. The complexes represent the 1st isolated mononuclear  
 compds. of this thioether-contg. analog of ethylenediaminetetraacetate.

IT **174912-87-9P**  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and crystal structure of)

IT **174912-84-6P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (prepn. and reaction with hydrogen halides or potassium thiocyanate)

IT **174912-85-7P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and reaction with hydrogen halides or potassium thiocyanate)

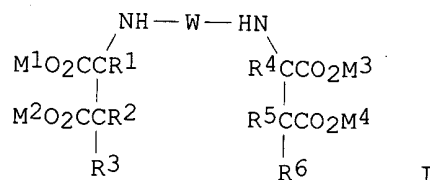
IT **174912-86-8P 174912-88-0P 174912-89-1P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

L19 ANSWER 11 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1995:879143 HCAPLUS  
 DOCUMENT NUMBER: 124:41276  
 TITLE: Processing of silver halide color photographic  
 materials using Fe chelate of aminopolycarboxylic acid  
 as bleaching agent  
 INVENTOR(S): Ishikawa, Takatoshi  
 PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 52 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07181654	A2	19950721	JP 1993-345918	19931224
US 5814436	A	19980929	US 1997-863931	19970527
PRIORITY APPLN. INFO.:			JP 1993-345918	19931224
			US 1994-362931	19941223

GI



AB The claimed method is characterized by that (1) the material has .gtoreq.1 Ag halide emulsion layer contg. tabular grains with the (100) crystal surface and AgCl content of 50-100 mol% and (2) the bleach soln. contains .gtoreq.1 Fe chelate of aminopolycarboxylic acid selected from the compd. I (R<sup>1-6</sup> = H, OH, aliph. or arom. group; W = bivalent group C atom; M<sup>1-4</sup> = H, cation) or R<sup>7</sup>N(CH<sub>2</sub>CO<sub>2</sub>M<sup>5</sup>)(CH<sub>2</sub>CO<sub>2</sub>M<sup>6</sup>), (R<sup>7</sup> = alkyl; M<sup>5</sup>, M<sup>6</sup> = H, cation). The Fe chelates have effective bleaching capability, shorten the time for bleach, and reduce bleach stain and bleach fog. The compds. also reduce environmental impact as they are biodegradable. The chelates are particularly suitable for bleach-fix acceleration in color paper processes.

IT 168201-05-6

RL: TEM (Technical or engineered material use); USES (Uses)  
(processing of Ag halide color photog. materials using Fe chelate of aminopolycarboxylic acid as bleaching agent)

L19 ANSWER 12 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1995:733548 HCAPLUS

DOCUMENT NUMBER: 123:213013

TITLE: Processing of silver halide color photographic materials

INVENTOR(S): Ishikawa, Takatoshi; Yoshida, Kazuaki; Seki, Hiroyuki

PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 45 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

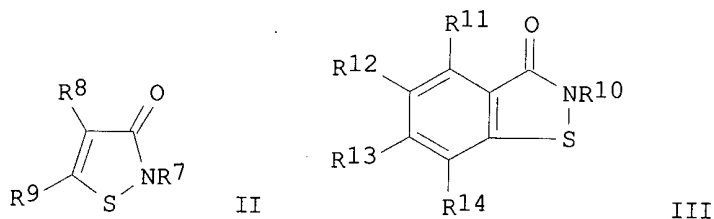
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07120898	A2	19950512	JP 1993-269208	19931027
PRIORITY APPLN. INFO.:			JP 1993-269208	19931027

GI



AB In the title method comprising color developing imagewise exposed Ag halide color photog. materials and desilvering followed by washing and/or stabilizing, a Fe(III) complex of a compd. R<sup>3</sup>CR<sup>2</sup>(CO<sub>2</sub>M<sup>2</sup>)CR<sup>1</sup>(CO<sub>2</sub>M<sup>1</sup>)NHWNHCR<sup>4</sup>(CO<sub>2</sub>M<sup>3</sup>)CR<sup>5</sup>(CO<sub>2</sub>M<sup>4</sup>)R<sup>6</sup> (I; R<sup>1-6</sup> = H, aliph. group, arom. group, hydroxy; W = divalent C-contg. linking group; M<sup>1-4</sup> = H, cation) is used as a bleaching

agent in the desilvering process and the washing water and/or the stabilizing soln. contains .gtoreq.1 of compd. II and III (R7, R10 = H, alkyl, amido, alkali metal; R8, R9, R11-14 = H, halo, alkyl, hydroxy, amino, nitro, carboxylic acid, sulfonci acid). The bleaching agent is highly biodegradable, stains of the materials are prevented even when small nos. of them are processed, and images with good storage stability are obtained. Thus, a color photog. film was processed using a bleach-fix bath contg. Fe(III) complex of I [R1-6 = M1-4 = H, W = (CH2)2] and washing water contg. II (R7 = Me, R8 = R9 = H).

IT 168201-05-6

RL: TEM (Technical or engineered material use); USES (Uses)  
(photog. processing using aminopolycarboxylic acid ferric complex  
bleaching agent and washing or stabilizing soln. contg. thiazole  
deriv.)

L19 ANSWER 13 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1994:701276 HCAPLUS

DOCUMENT NUMBER: 121:301276

TITLE: A new general solid-phase method for the synthesis of  
backbone-to-backbone cyclized peptides

AUTHOR(S): Kaljuste, Kalle; Unden, Anders

CORPORATE SOURCE: Dep. Neurochem. Neurotoxicol., Stockholm Univ.,  
Stockholm, Swed.SOURCE: International Journal of Peptide & Protein Research  
(1994), 43(5), 505-11  
CODEN: IJPPC3; ISSN: 0367-8377

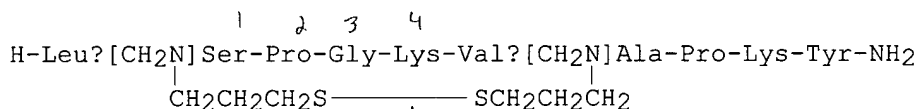
DOCUMENT TYPE: Journal

LANGUAGE: English

GI

Cl. 1 5

Novelty



diagram

AB A model peptide with the sequences Ala-Pro-Lys(2ClZ)-Tyr(2BrZ) was synthesized on a 4-methylbenzhydryl amine (MBHA) polystyrene resin using conventional Boc/benzyl protective group strategy. The amino acid aldehyde Boc-valinal was coupled by reductive alkylation with NaCNBH3 in acidified DMF for 1 h. The secondary amine in the peptide-resin Boc-Val.psi.[CH2NH]Ala-Pro-Lys(2ClZ)-Tyr(2BrZ)-MBHA was reductively alkylated by 3(4-methylbenzylthio)propanal at 40.degree. for 6 h, resulting the peptide-resin Boc-Val.psi.[CH2N(CH2CH2CH2S-pMeBzl)]Ala-Pro-Lys(2ClZ)-Tyr(2BrZ)-MBHA. After the removal of the Boc group the synthesis was continued employing the above-mentioned methods, which led to the resin-bound peptide Leu.psi.[CH2N(CH2CH2CH2S-pMeBzl)]Ser-Pro-Gly-Lys(2ClZ)-Val.psi.[CH2N(CH2CH2CH2S-pMeBzl)]Ala-Pro-Lys(2ClZ)-Tyr(2BrZ)-MBHA. The peptide was cleaved from the resin with hydrogen fluoride. Reversed-phase HPLC and plasma desorption mass spectrometry anal. showed that the expected peptide Leu.psi.[CH2N(CH2CH2CH2SH)]Ser-Pro-Gly-Lys-Val.psi.[CH2N(CH2CH2CH2SH)]Ala-Pro-Lys-Tyr-NH2 was obtained as the major product with low levels of side products. Intramol. oxidn. of the thiols gave the backbone to backbone cyclized peptide-I.

✓ for  
Somatosubm. m.  
ref.

IT 159105-49-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, by solid-phase method)

L19 ANSWER 14 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1993:437403 HCAPLUS

DOCUMENT NUMBER: 119:37403

TITLE: Method for processing color photographic material

INVENTOR(S): Seki, Hiroyuki  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04274236	A2	19920930	JP 1991-119608	19910228

PRIORITY APPLN. INFO.: JP 1991-119608 19910228

AB In the title photog. processing method involving processing a color developed Ag halide photog. material with a bleaching soln., a ferric complex salt(s) of an org. acid is used as a bleaching agent, whose concn. is controlled to 0.10 - 0.1 mol/L, with the said org. acid contg. .gtoreq.2 N atoms, and the bleaching agent of redox potential .gtoreq.200 mV should account for .gtoreq.50 mol% relative to the total amt. of bleaching agents used. The processing time following bleaching and before drying is controlled to .ltoreq.13 min. Fast desilvering is achieved.

IT **148354-20-5**  
RL: USES (Uses)  
(bleaching agent, photog. bleaching soln. contg.)

L19 ANSWER 15 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1993:112883 HCAPLUS  
DOCUMENT NUMBER: 118:112883  
TITLE: Composition for processing silver halide color photographic material and photographic processing method

INVENTOR(S): Okada, Hisashi; Yagihara, Morio; Inaba, Tadashi  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 36 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04204533	A2	19920724	JP 1990-330777	19901130

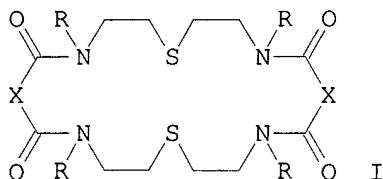
PRIORITY APPLN. INFO.: JP 1990-330777 19901130

AB The title compn. contains a metal chelating compd. formed from an aminoalkanoic acid and a metal salt such as an Fe(III) or Mn(III) salt. The aminoalkanoic acid may be represented by W1N(R11)L1A1 (R11 = H, aliph. group, arom. moiety; W1 = aliph. group or arom. moiety having SR1 as substituent; R1 = aliph. group or arom. moiety; W1 and R11 may together form a ring; L1 = alkylene, arylene, etc.; A1 = carboxy, sulfo, etc.). The use of the title compn. inhibits the formation of stains. Also claimed is a processing method using the title material.

IT **146110-27-2**  
RL: USES (Uses)  
(photog. bleach solns. contg.)

L19 ANSWER 16 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1993:80910 HCAPLUS  
DOCUMENT NUMBER: 118:80910  
TITLE: Polyfunctional macroheterocycles. 4. Synthesis and some chemical transformations of nitrogen- and sulfur-containing crowns with exocyclic methoxycarbonyl, cyano, and phenethyl groups

AUTHOR(S): Voronkov, M. G.; Knutov, V. I.; Butin, M. K.  
 CORPORATE SOURCE: Irk. Inst. Org. Khim., Irkutsk, 664033, Russia  
 SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1992), (2),  
 273-6  
 CODEN: KGSSAQ; ISSN: 0132-6244  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 GI



AB Acylation of 1,5-diamino-, 1,5-bis(2-phenethylamino)- and 1,5-bis(2-methoxycarbonylethylamino)-3-thiapentanes by adipoyl and phthaloyl chlorides, and also by oxalyl chloride gave the corresponding 13-, 22- and 18-membered macroheterocycles, contg. exocyclic methoxycarbonyl and phenylethyl groups. Redn. of endocyclic amides and exocyclic esters on nitriles by  $\text{LiAlH}_4$  gave nitrogen- and sulfur-contg. crown compds., which were transformed to  $\text{CH}_2\text{NR}_2$ ,  $\text{CH}_2\text{OH}$ , and  $\text{CH}_2\text{NH}_2$  groups, resp. Macrobicyclic compds. contg. endocyclic amide groups were prepd. and reduced to give the corresponding  $\text{CH}_2\text{NR}_2$  derivs. Thus, cyclocondensation of  $\text{RNHCH}_2\text{CH}_2\text{SCH}_2\text{CH}_2\text{NHR}$  ( $\text{R} = \text{H}$ ,  $\text{PhCH}_2\text{CH}_2$ ,  $\text{CH}_2\text{CH}_2\text{CO}_2\text{Me}$ ) with  $\text{ClOXCOCX}$  ( $\text{X} = \text{bond}$ , 1,2- $\text{C}_6\text{H}_4$ ) gave 68-72% macroheterocycles I.

IT 145644-73-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

L19 ANSWER 17 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1990:539830 HCAPLUS

DOCUMENT NUMBER: 113:139830

TITLE: Study of chelates of N,N,N',N'-tetrakis(carboxymethyl)cystamine with divalent transition and post-transition metal ions in solution  
 AUTHOR(S): Gonzalez Perez, J. M.; Gonzalez Garcia, S.; Niclos, Gutierrez, J.

CORPORATE SOURCE: Fac. Farm., Univ. Granada, Granada, 18071, Spain

SOURCE: Anales de Quimica (1990), 86(1), 9-18

CODEN: ANQUEX; ISSN: 1130-2283

DOCUMENT TYPE: Journal

LANGUAGE: Spanish

AB Aq. soln. systems  $\text{H}_4\text{L}/\text{M}(\text{II})$  of N,N,N',N'-tetrakis(carboxymethyl)cystamine [ $\text{H}_4\text{L} = \text{TCC} = (\text{HO}_2\text{CCH}_2)_2\text{NC}_2\text{H}_4\text{S}-\text{SC}_2\text{H}_4\text{N}(\text{CH}_2\text{CO}_2\text{H})_2$  and transition or post-transition  $\text{M}(\text{II})$  ions ( $\text{M} = \text{Mn}$ ,  $\text{Fe}$ ,  $\text{Co}$ ,  $\text{Ni}$ ,  $\text{Cu}$ ,  $\text{Zn}$ ,  $\text{Cd}$ ,  $\text{Pb}$ ) were studied by potentiometric, conductometric and spectrophotometric ( $\text{Co}$ ,  $\text{Ni}$ ,  $\text{Cu}$ ) methods. The disocn. consts. ( $\text{pK}_a$ ) and/or formation consts. ( $\log .\text{beta.}$ ) of the species  $\text{MH}_2\text{L}$ ,  $\text{MHL}$ ,  $\text{ML}$  or  $\text{M}_2\text{L}_2$  ( $\text{M} .\text{dbldag. Pb}$ ), and  $\text{M}_2\text{L}$  for  $\text{I} = 0.1 \text{ M}$  ( $\text{KNO}_3$ ) and  $t = 25.00 \pm 0.05 .\text{degree.C}$  are reported. By appropriate comparisons of these results with literature data for chelates of a selection of polydentate ligands (with or without thioether sulfur as potential donor atom), the most probable structure for the studied TCC chelates is discussed. In  $\text{MH}_2\text{L}$  and  $\text{MHL}$  species, the ligand ( $\text{H}_2\text{L}$  and  $\text{HL}$  resp.) should acts mainly as a tridentate N-substituted-iminodiacetate (IDA) chelating agent, the interaction or weak coordination disulfide-to-metal ion only seem probable with  $\text{M} = \text{Cd}$  and  $\text{Pb}$ . For  $\text{M} .\text{dbldag. Pb}$ , the non protonated chelates with  $\text{TCC}/\text{M} = 1/1$  will be

dinuclear species (M<sub>2</sub>L<sub>2</sub>), where the octahedral environment of each M(II) ion should be reached with two NO<sub>2</sub>-tridentate IDA groups (M = Mn, Fe) or with one NO<sub>2</sub>-tridentate IDA group and other SNO-tridentate .beta.-mercapto-ethyl-amino-acetate moiety (M = Co, Ni, Cu, Zn, Cd) from different ligand L units. In PbL, the ligand L will at least acts as SNO<sub>2</sub>-tetradentate. This role will be doubly played by the ligand L in the chelation of two metal ions to form M<sub>2</sub>L with M = Pb, Cd, Ni, Cu and probably Co and Zn, whereas each moiety of L will acts only as NO<sub>2</sub>-tridentate (IDA type) with the more hard metal ions Fe(II) and Mn(II) in the corresponding M<sub>2</sub>L chelates.

IT 129500-42-1 129500-43-2 129500-44-3  
129500-45-4 129500-46-5 129500-47-6  
129524-56-7

RL: PRP (Properties); FORM (Formation, nonpreparative)  
(formation consts. of)

L19 ANSWER 18 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1990:422715 HCAPLUS

DOCUMENT NUMBER: 113:22715

TITLE: Enantioselective conjugate addition of Grignard reagents to enones catalyzed by chiral zinc(II) complexes

AUTHOR(S): Jansen, Johan F. G. A.; Feringa, Ben L.

CORPORATE SOURCE: Dep. Org. Chem., Univ. Groningen, Groningen, 9747 AG, Neth.

SOURCE: Journal of Organic Chemistry (1990), 55(13), 4168-75  
CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 113:22715

AB Various chiral zinc(II) complexes catalyze the asym. 1,4-addn. of Grignard reagents to .alpha.,.beta.-unsatd. ketones with high chemoselectivities (yields of 1,4-adducts, 83-99%), high regioselectivities (1,4/1,2 ratios up to 499) and modest enantioselectivities (ee's up to 33%). A study of several factors (i.e., ligand, solvent, counterions, order and rate of addns., temp., and the nature of Grignard reagents) that influence the regio- and enantioselectivities is given. Based on the addn. of isopropylmagnesium halides to 2-cyclohexenone as a model reaction, it was established that the highest enantioselectivities are reached with in situ prepd. zinc complexes derived from optically active diamino alc. ligands using lithium bases in THF as the solvent. A mechanistic rationalization is given.

IT 127357-20-4

RL: CAT (Catalyst use); USES (Uses)

(zinc catalysts contg., for enantioselective conjugate addn. of Grignard reagent to cyclohexenone)

L19 ANSWER 19 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1989:633674 HCAPLUS

DOCUMENT NUMBER: 111:233674

TITLE: Preparation of chelates of aminopolycarboxylates as therapeutic and diagnostic agents

INVENTOR(S): Berg, Arne; Almen, Torsten; Thomassen, Terje;

Klaveness, Jo; Rongved, Pal

PATENT ASSIGNEE(S): Nycomed A/S, Norway

SOURCE: Eur. Pat. Appl., 42 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.

KIND DATE

APPLICATION NO. DATE

EP 299795	A2	19890118	EP 1988-306520	19880715
EP 299795	A3	19890802		
EP 299795	B1	19920318		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
WO 8900557	A1	19890126	WO 1988-GB572	19880715
W: AU, DK, FI, GB, HU, JP, NO, SU, US				
AU 8819980	A1	19890213	AU 1988-19980	19880715
AU 617338	B2	19911128		
JP 02504269	T2	19901206	JP 1988-505904	19880715
JP 2833766	B2	19981209		
HU 54621	A2	19910328	HU 1988-4196	19880715
EP 466200	A1	19920115	EP 1991-113755	19880715
EP 466200	B1	19960424		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AT 73761	E	19920415	AT 1988-306520	19880715
ES 2033433	T3	19930316	ES 1988-306520	19880715
HU 64950	A2	19940328	HU 1993-2702	19880715
AT 137228	E	19960515	AT 1991-113755	19880715
ES 2086445	T3	19960701	ES 1991-113755	19880715
RU 2073005	C1	19970210	RU 1988-4743079	19880715
ZA 8805178	A	19890426	ZA 1988-5178	19880718
DK 9000074	A	19900111	DK 1990-74	19900111
NO 9000192	A	19900308	NO 1990-192	19900115
NO 179973	B	19961014		
NO 179973	C	19970122		
AU 9183431	A1	19911107	AU 1991-83431	19910829
AU 640263	B2	19930819		

## PRIORITY APPLN. INFO.:

GB 1987-16778	19870716
GB 1987-16914	19870717
EP 1988-306520	19880715
HU 1988-4196	19880715
WO 1988-GB572	19880715

## OTHER SOURCE(S): MARPAT 111:233674

AB XCHR1NZ(CHR2)nA(CHR3)mNZ1CHR4X1 [I; R1-R9 = H, hydroxyalkyl, (hydroxylated) alkoxy, alkoxyalkyl; A, A1 = O, S, NY; ACHR1 = C-N bond; X-X4 = carboxy (deriv.), R1; Y = (CHR5)p N(CHR6X2)2, CHRX3; Z = CHR7X4; groups Z together = (CHR8)qA1(CHR9)r; n, m, p, q, r = 2-4], useful as chelating agents for prepn. of diagnostic and therapeutic agents (no data), were prepd. N(CH2CO2H)3, H2SO4, and EtOH were refluxed 4 h to give N(CH2CO2Et)3, which in EtOH was added dropwise to hot aminopropanediol. The mixt. was stirred 3 h at 120.degree. to give an amide. The latter in DMF was stirred with tosic acid and MeC(OMe)2Ph at 60.degree. and 200 mbar to give a ketal which was treated with LiAlH4 in refluxing THF followed by treatment with BrCH2CO2Na in MeOH/H2O at 40.degree. and stirring overnight with HBr in H2O/acetone to give N,N,N-tris-[(N'-carboxymethyl-N'-2,3-dihydroxypropyl)-2-aminoethyl]amine. The Gd(III) chelate of the latter was prepd. by heating with Gd2O3 in H2O at 95.degree. overnite. A soln. contg. 6.9 g of the chelate and 20 mL of H2O was prepd.

## IT 122596-98-9P 122596-99-0P 122597-02-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as diagnostic agent)

L19 ANSWER 20 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1986:218052 HCAPLUS

DOCUMENT NUMBER: 104:218052

TITLE: A binuclear copper(II) complex with a bridging thioether ligand. Crystal and molecular structure of dicopper (thiobis(ethylenenitrilo)tetraacetate) pentahydrate

AUTHOR(S): Berg, Jeremy M.; Hodgson, Keith O.

CORPORATE SOURCE: Dep. Chem., Stanford Univ., Stanford, CA, 94305, USA

SOURCE: Inorganic Chemistry (1986), 25(11), 1800-3

CODEN: INOCAJ; ISSN: 0020-1669

DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Cu<sub>2</sub>(TEDTA).5H<sub>2</sub>O (H<sub>4</sub>TEDTA = thiobis(ethylenenitrilo)tetraacetic acid) was prepd. and its structure detd. by x-ray diffraction methods. The crystals belong to the space group P2<sub>1</sub>2<sub>1</sub>2<sub>1</sub> with a 9.646(4), b 14.264(5), c 14.724(5) Å, and Z = 4. The structure was refined by full-matrix least squares to R = 3.8%, R<sub>w</sub> = 4.7%. The crystal structure consists of binuclear units contg. 2 independent Cu(II) ions, each in a tetragonally distorted octahedral environment. The thioether S atom bridges the Cu atoms. The crystal structure is held together by a combination of bridging carboxylate groups and an extended H-bond network.

IT 101348-83-8P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and crystal structure of)

L19 ANSWER 21 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1980:84850 HCAPLUS

DOCUMENT NUMBER: 92:84850

TITLE: An electrochemical study of the adsorption of two isomeric chromium(III) complexes on mercury electrodes: thio ether as an anchoring group

AUTHOR(S): Pearce, Pamela J.; Anson, Fred C.

CORPORATE SOURCE: Arthur A. Noyes Lab., California Inst. Technol., Pasadena, CA, 91125, USA

SOURCE: Journal of Electroanalytical Chemistry and Interfacial Electrochemistry (1979), 105(2), 317-28  
CODEN: JEIEBC; ISSN: 0022-0728

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Cyclic voltammetry and chronocoulometry were used to exam. the electrochem. and adsorption by Hg of 2 isomeric complexes of Cr(III) with a multidentate ligand bearing a thioether group, thiobis(ethylenenitrilo)tetraacetic acid, S[CH<sub>2</sub>CH<sub>2</sub>N(CH<sub>2</sub>COOH)<sub>2</sub>]<sub>2</sub>. One isomer contains a S-Cr bond and is very strongly adsorbed. The 2nd isomer lacks this bond and is adsorbed to a lesser degree. Back-bonding from Cr to S is argued to play an important role in the adsorption of the first isomer. Upon redn., both isomers yield the same (Cr(II) product. A dimeric form of the 2nd isomer in which the 2 Cr(III) centers are bridged by an acetate group is proposed to form at certain pH values. The different coordination environments of the 2 Cr(III) centers in the dimer cause them to be reduced at different potentials.

IT 70983-09-4 70983-10-7

RL: PEP (Physical, engineering or chemical process); PROC (Process)  
(adsorption of, by mercury electrode)

L19 ANSWER 22 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1979:533280 HCAPLUS

DOCUMENT NUMBER: 91:133280

TITLE: Coordination chemistry of chromium(III) with thiobis(ethylenenitrilo)tetraacetic acid (TEDTA)

AUTHOR(S): Pearce, Pamela J.; Gray, Harry B.; Anson, Fred C.

CORPORATE SOURCE: Arthur A. Noyes Lab., California Inst. Technol., Pasadena, CA, 91125, USA

SOURCE: Inorganic Chemistry (1979), 18(9), 2593-9  
CODEN: INOCAJ; ISSN: 0020-1669

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The reaction between Cr(ClO<sub>4</sub>)<sub>3</sub> and thiobis(ethylenenitrilo)tetraacetic acid (TEDTA) leads to 2 different geometrically isomeric complexes depending upon the pH of the reaction soln. Pure solns. of the 2 isomers were prepd. and their spectra, pH titrns., anation by azide, reactions with heavy metal cations, and electrochem. were studied. For purposes of



comparison, the behavior of analogous Cr(III) complexes of EDTA, oxybis(ethylenenitrilo)tetraacetic acid, and pentamethylenedinitrilotetraacetic acid were also examd. The 2 isomeric Cr-TEDTA complexes are concluded to have cis and trans configurations with respect to the coordinated N atoms. In the cis isomer, the ligand is pentadentate and a H<sub>2</sub>O mol. is coordinated to Cr(III). In the trans isomer, the ligand is hexadentate and the thioether S atom occupies a coordination position. The position of the isomerization equil. appears to be governed by the difference in pK.alpha. of the uncoordinated acetic acid group in the two isomers. Both isomers spontaneously adsorb on Hg electrodes and the adsorption of the trans isomer, in which the S atom is coordinated to the Cr(III) center, is extraordinarily strong.

IT 70983-09-4P 70983-10-7P 71031-50-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. and reactions of)

L19 ANSWER 23 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1967:417469 HCAPLUS

DOCUMENT NUMBER: 67:17469

TITLE: Zirconium complex formation with some polyaminopolyacetic acids

AUTHOR(S): Tikhonova, L. I.

SOURCE: Zhurnal Neorganicheskoi Khimii (1967), 12(4), 939-43  
CODEN: ZNOKAQ; ISSN: 0044-457X

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB The chelate formation of Zr<sup>4+</sup> with following complexons was studied by an ion exchange method: EDTA (I), diethylenetriaminepentaacetic acid (II), 2-propanol-1,3-diaminetetraacetic acid (III), ethyl ether 2,2'-diaminetetraacetic acid (IV), and ethyl sulfide 2,2'-diaminetetraacetic acid (V). The distribution of carrier free <sup>95</sup>Zr between soln. and KU-2 cation exchange resin was measured by the elution of <sup>95</sup>Zr from the column with complexon solns. Only 1:1 chelates were found. The instability consts. and media in which they have been detd. are: I, (1.1 .+- . 0.1) .times. 10<sup>-29</sup>, 1.2M HCl; II, (1.09 .+- . 0.04) .times. 10<sup>-34</sup>, 0.39M HCl; III, (2.6 .+- . 0.2) .times. 10<sup>-24</sup>, 0.1M KCl, pH 1.8; IV, (1.9 .+- . 0.1) .times. 10<sup>-25</sup>, 0.1M KCl, pH 1.6; V, (6.8 .+- . 0.4) .times. 10<sup>-24</sup>, 0.1M KCl, pH 2.2. The high stability of the II chelate is ascribed to the octadentate function of the II anion. The stability of the Zr<sup>4+</sup>-I chelate is higher than that of the corresponding Th<sup>4+</sup>-I chelate is higher than that of the corresponding Th<sup>4+</sup>, U<sup>4+</sup>, and Pu<sup>4+</sup> chelates. This is explained by the high ionic charge to radius ratio and rather low ionization potential of Zr<sup>4+</sup>.

IT 16871-74-2

RL: PRP (Properties)  
(stability of)

L19 ANSWER 24 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1967:119393 HCAPLUS

DOCUMENT NUMBER: 66:119393

TITLE: Spectrophotometric study of complex-formations of thallium(III) with some complexons

AUTHOR(S): Kornev, V. I.; Astakhov, K. V.; Rybina, V. I.

CORPORATE SOURCE: V. I. Lenin Gos. Ped. Inst., Moscow, USSR

SOURCE: Ricerca Scientifica (1967), 41(2), 420-5  
CODEN: RISCAZ; ISSN: 0035-5011

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB Complex formation of Tl<sup>3+</sup> with 2,2'-diaminodiethyl sulfide-N,N',N'-tetraacetic acid (H4R) and diethylenetriaminepentaacetic acid (H5P) was studied at 18-20.degree. spectrophotometrically. The isomolar plot of the optical d. D vs. compn. and the D vs. [Ti<sup>3+</sup>]: [H4R] plot showed only the

1:1 complex. In the Tl(ClO<sub>4</sub>)<sub>3</sub>-H<sub>5</sub>P system there are 1:1 and 2:1 complexes. The 1st is not stable. The av. values for the acidolysis const. K<sub>ac</sub> and the instability const. K<sub>i</sub> of the 1:1 complexes are: for H<sub>5</sub>P 4.37 and 3.92 .times. 10<sup>-29</sup>, and for H<sub>4</sub>R 6.39 and 4.95 .times. 10<sup>-22</sup>, resp. For the corresponding complexes with Fe<sup>3+</sup>, K<sub>ac</sub> and pK<sub>i</sub> are: for H<sub>5</sub>P 0.354 and 27.50, and for H<sub>4</sub>R 1.424 and 20.67, resp.

IT 15977-96-5

RL: PRP (Properties)

(ionization and stability const. of)

L19 ANSWER 25 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1965:36434 HCAPLUS

DOCUMENT NUMBER: 62:36434

ORIGINAL REFERENCE NO.: 62:6388h, 6389a-b

TITLE: 2,2'-Diaminodiethylsulfido-N,gN,N',N'-tetraacetic acid and some of its inner complexes

AUTHOR(S): Smolin, D. D.; Razbitnaya, L. M.; Viktorov, Yu. M.

SOURCE: Zhurnal Obshchei Khimii (1964), 34(11), 3713-15

CODEN: ZOKHA4; ISSN: 0044-460X

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB Ethylenimine in H<sub>2</sub>O was satd. with H<sub>2</sub>S at 25-30.degree., and the mixt. kept 10-12 hrs. at 0-5.degree. without access of air and evapd. in vacuo under N to give 65% S(CH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub>)<sub>2</sub>, b<sub>2</sub> 87-90.degree., m. 0.5-1.5.degree., d<sub>20</sub> 1.051, n<sub>20D</sub> 1.533. This with ClCH<sub>2</sub>CO<sub>2</sub>H in H<sub>2</sub>O was treated at 20-30.degree. with 40% NaOH, finally solid NaOH, the mixt. kept 12 hrs. at room temp., adjusted to pH 2 with HCl, and chilled, and similarly repptd. from alk. soln. with HCl to give 55% S[CH<sub>2</sub>CH<sub>2</sub>NH(CH<sub>2</sub>CO<sub>2</sub>H)<sub>2</sub>]<sub>2</sub>, decompd. 200.degree.. This treated with aq. solns. of salts of indicated elements gave the following complexes: C<sub>12</sub>H<sub>17</sub>CeN<sub>2</sub>O<sub>8</sub>S.2H<sub>2</sub>O, stable at room temp. (anhyd. form after drying in vacuo at 140.degree.); C<sub>12</sub>H<sub>17</sub>N<sub>2</sub>O<sub>8</sub>SY.3H<sub>2</sub>O (anhyd. form after vacuum drying at 140.degree.); yellow C<sub>12</sub>H<sub>18</sub>N<sub>2</sub>O<sub>10</sub>SU.4H<sub>2</sub>O, decompd. gradually on standing (anhyd. form after vacuum drying at 140.degree.). Absorption bands (uv) of these were reported.

IT 95294-14-7, Uranium, dioxo[dihydrogen

[thiobis(ethylenenitrilo)]tetraacetato]-

(prepn. of)

=>

=>

=> fil reg

FILE 'REGISTRY' ENTERED AT 11:05:24 ON 22 JUL 2003

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STRUCTURE FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7

DICTIONARY FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

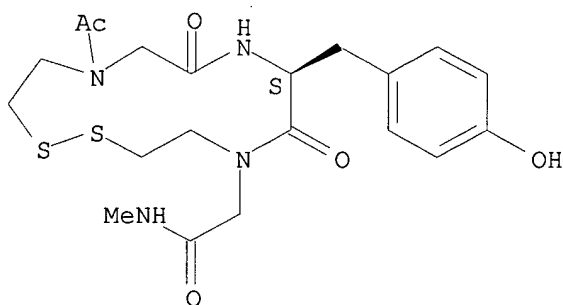
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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP

=> d sqide can 118 1-49

Absolute stereochemistry.

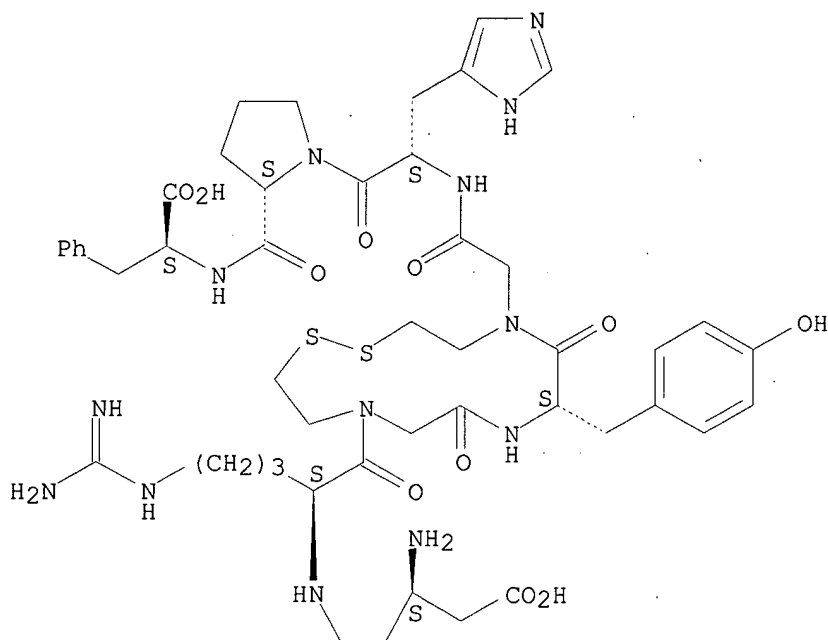


1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 139:30973

Absolute stereochemistry.

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\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 139:30973

L18 ANSWER 3 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 425428-86-0 REGISTRY  
 CN Glycinamide, 3-(2-naphthalenyl)-D-alanyl-N-(2-mercaptoethyl)glycyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (2.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 9  
 NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge	Gly-2	-	Gly-9	covalent bridge
stereo	Ala-1	-		D
stereo	Trp-5	-		D

SEQ 1 AGFWWKTFG

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

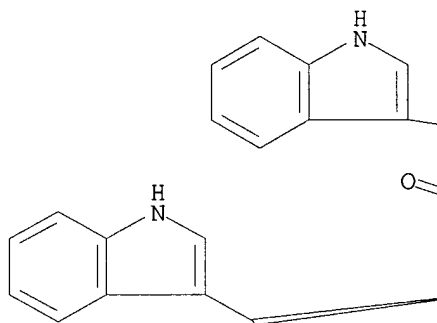
MF C71 H83 N13 O10 S2

SR CA

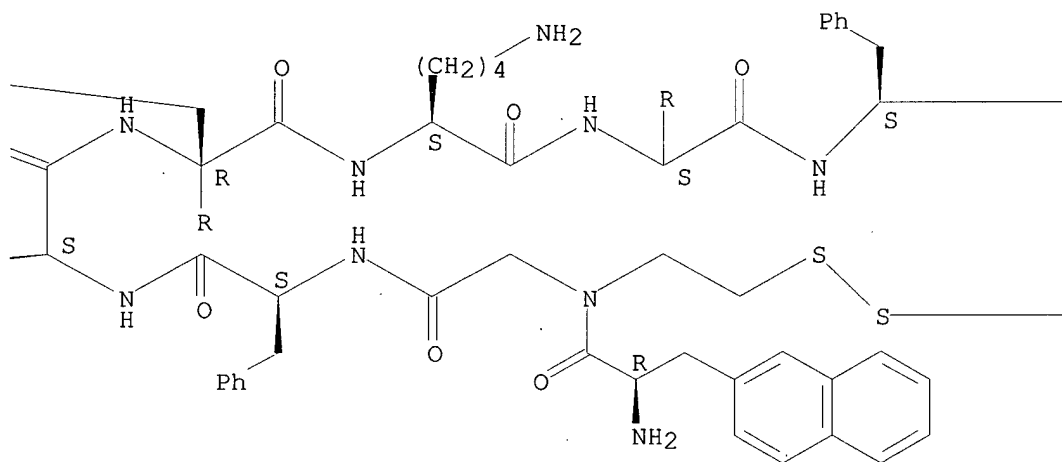
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

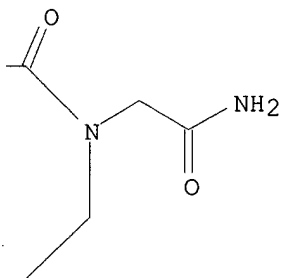
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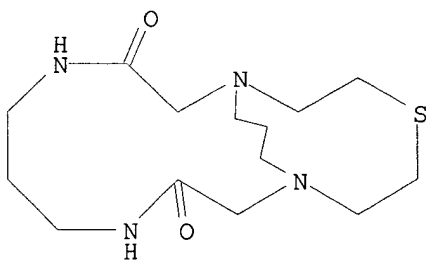


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 136:386384

L18 ANSWER 4 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 371156-16-0 REGISTRY  
CN 14-Thia-1,4,8,11-tetraazabicyclo[9.5.3]nonadecane-3,9-dione (9CI) (CA  
INDEX NAME)  
FS 3D CONCORD  
MF C14 H26 N4 O2 S  
SR CA  
LC STN Files: CA, CAPLUS



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:351981

L18 ANSWER 5 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 252845-48-0 REGISTRY  
CN Glycinamide, 3-(1-naphthalenyl)-D-alanyl-N-(2-mercaptoethyl)glycyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (2.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)

## OTHER NAMES:

CN PTR 3221  
FS PROTEIN SEQUENCE; STEREOSEARCH  
SQL 9  
NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge	Gly-2	-	Gly-9	covalent bridge
stereo	Ala-1	-		D
stereo	Trp-5	-		D

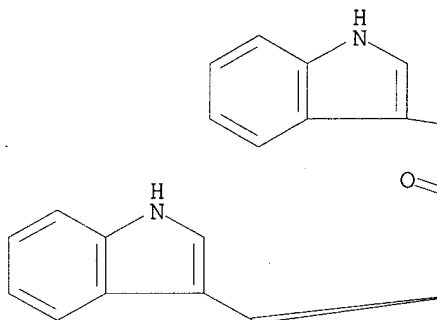
SEQ 1 AGFWWKTFG

## \*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

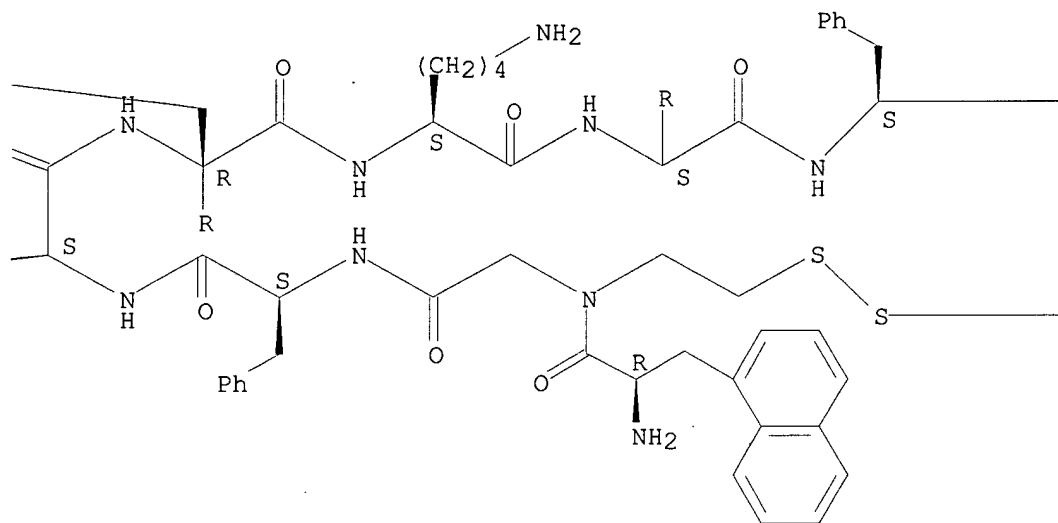
MF C71 H83 N13 O10 S2  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

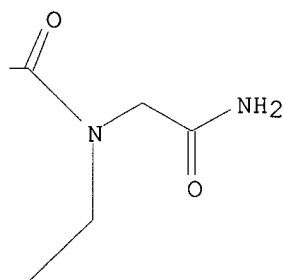
PAGE 1-A



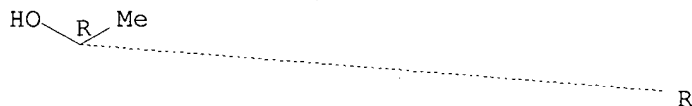
PAGE 1-B



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PAGE 2-A



3 REFERENCES IN FILE CA (1947 TO DATE)  
 3 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 138:117735 ,

REFERENCE 2: 136:341003

REFERENCE 3: 132:50250

L18 ANSWER 6 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 252845-47-9 REGISTRY



CN Glycinamide, D-phenylalanyl-N-(2-mercaptoethyl)glycyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (2.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)

## OTHER NAMES:

CN PTR 3219

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 9

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge	Gly-2	-	Gly-9	covalent bridge
stereo	Phe-1	-		D
stereo	Trp-5	-		D

SEQ 1 FGFWWKTFG

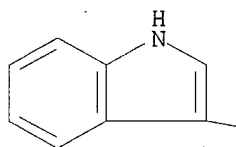
MF C67 H81 N13 O10 S2

SR CA

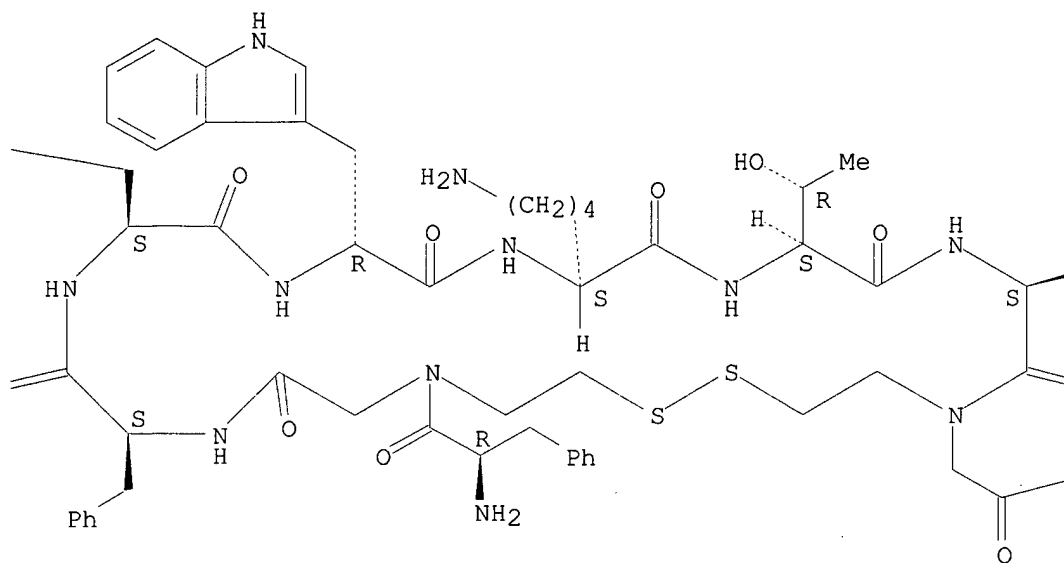
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

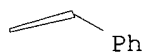
PAGE 1-A



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PAGE 1-C



4 REFERENCES IN FILE CA (1947 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 138:117735

REFERENCE 2: 136:386384

REFERENCE 3: 136:341003

REFERENCE 4: 132:50250

L18 ANSWER 7 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 252845-45-7 REGISTRY

CN Glycinamide, N-(2-mercaptoethyl)glycyl-L-phenylalanyl-L-tryptophyl-D-

tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic  
(1.fwdarw.8)-disulfide (9CI) (CA INDEX NAME)

## OTHER NAMES:

CN PTR 3213

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge	Gly-1	-	Gly-8	covalent bridge
stereo	Trp-4	-		D

SEQ 1 GFWWKTFG

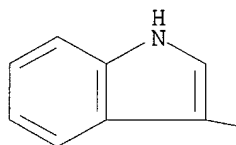
MF C58 H72 N12 O9 S2

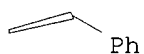
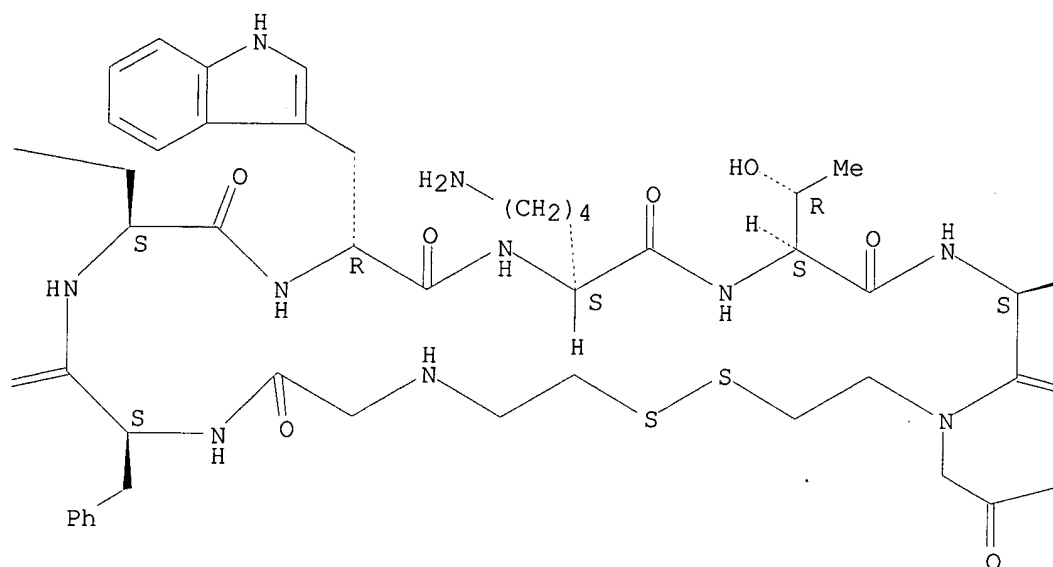
SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A





4 REFERENCES IN FILE CA (1947 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 138:117735

REFERENCE 2: 136:386384

REFERENCE 3: 136:341003

REFERENCE 4: 132:50250

L18 ANSWER 8 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 213843-47-1 REGISTRY

CN Cyclo[L-alanyl-D-phenylalanyl-N-(3-mercaptopropyl)-L-alanyl-D-phenylalanyl-

L-alanyl-D-phenylalanyl-N-(3-mercaptopropyl)-L-alanyl-D-phenylalanyl],  
cyclic (3.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

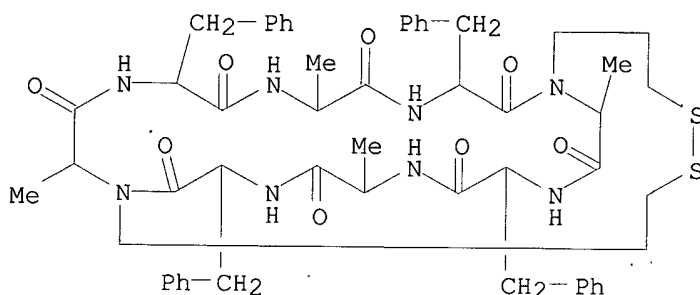
FS PROTEIN SEQUENCE; STEREOSEARCH  
SQL 8  
NTE cyclic  
modified (modifications unspecified)

type	-----	location	-----	description
bridge	Ala-1	-	Ala-5	covalent bridge
stereo	Phe-2	-		D
stereo	Phe-4	-		D
stereo	Phe-6	-		D
stereo	Phe-8	-		D

SEQ 1 AFAFAFAF

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

MF C54 H66 N8 O8 S2  
SR CA  
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 129:276287

L18 ANSWER 9 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 192199-02-3 REGISTRY  
CN Glycinamide, L-arginyl-L-phenylalanyl-L-phenylalanyl-N-[4-[[[(4-carboxy-1-oxobutyl)(2-mercaptoethyl)amino]acetyl]amino]butyl]glycyl-L-leucyl-N2-(2-mercaptoethyl)-, (4.fwdarw.1)-lactam, cyclic (4.fwdarw.6)-disulfide (9CI)  
(CA INDEX NAME)  
FS PROTEIN SEQUENCE; STEREOSEARCH  
SQL 7,6,1  
NTE multichain  
modified (modifications unspecified)

type	-----	location	-----	description
bridge	Arg-1	-	Gly-1'	covalent bridge
bridge	Gly-6	-	Gly-1'	covalent bridge

SEQ 1 RFFGLG

SEQ 1 G

## \*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

MF C49 H72 N12 O9 S2

SR CA

LC STN Files: CA, CAPLUS

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 127:95584

L18 ANSWER 10 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 192199-00-1 REGISTRY

CN Glycinamide, L-arginyl-L-phenylalanyl-L-phenylalanyl-N-[3-[[[(5-carboxy-1-oxopentyl)(3-mercaptopropyl)amino]acetyl]amino]propyl]glycyl-L-leucyl-N2-(2-mercaptopethyl)-, (4.fwdarw.1)-lactam, cyclic (4.fwdarw.6)-disulfide (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 7,6,1

NTE multichain

modified (modifications unspecified)

type	location		description
bridge	Arg-1	- Gly-1'	covalent bridge
bridge	Gly-6	- Gly-1'	covalent bridge

.SEQ 1 RFFGLG

SEQ 1 G

## \*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

MF C50 H74 N12 O9 S2

SR CA

LC STN Files: CA, CAPLUS

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 127:95584

L18 ANSWER 11 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 192198-98-4 REGISTRY

CN Glycinamide, L-arginyl-L-phenylalanyl-L-phenylalanyl-N-[3-[[[(5-carboxy-1-oxopentyl)(3-mercaptopropyl)amino]acetyl]amino]propyl]glycyl-L-leucyl-N2-(mercaptomethyl)-, (4.fwdarw.1)-lactam, cyclic (4.fwdarw.6)-disulfide (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 7,6,1

NTE multichain

modified (modifications unspecified)

type	location		description
bridge	Arg-1	- Gly-1'	covalent bridge
bridge	Gly-6	- Gly-1'	covalent bridge

SEQ 1 RFFGLG

SEQ 1 G

## \*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

MF C49 H72 N12 O9 S2

SR CA

LC STN Files: CA, CAPLUS

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 127:95584

L18 ANSWER 12 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 182491-11-8 REGISTRY

CN L-Methioninamide, N-[2-[[N-[2-[(L-arginyl-L-prolyl-L-lysyl-L-prolyl)amino]-4-(methylthio)butyl]-N-(3-mercaptopropyl)-L-methionyl-L-phenylalanyl]amino]-3-phenylpropyl]-N-(3-mercaptopropyl)glycyl-L-leucyl-, cyclic (5.fwdarw.7)-disulfide, [5(S),7(S)]- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 11

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge		Met-6	- Gly-9	covalent bridge

SEQ 1 RPKPMMFFGL M

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

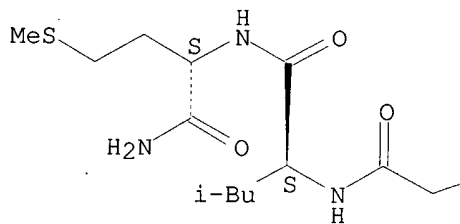
MF C69 H114 N16 O9 S5

SR CA

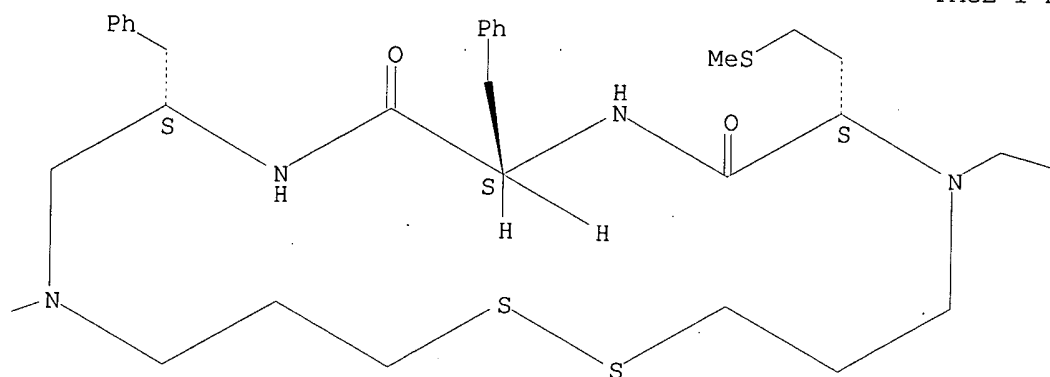
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

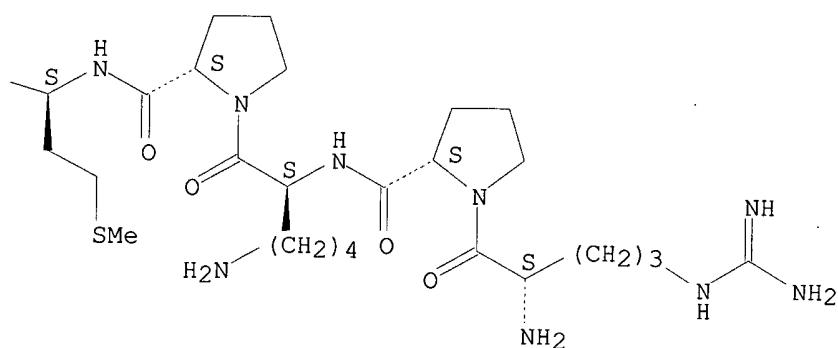
PAGE 1-A



PAGE 1-B



PAGE 1-C



1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 125:266403

L18 ANSWER 13 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 182491-08-3 REGISTRY

CN Substance P, 6-de-L-glutamine-7-[N-[2-amino-4-(methylthio)butyl]-N-(3-mercaptopropyl)-L-phenylalanine]-8-de-L-phenylalanine-9-[N-(2-amino-3-phenylpropyl)-N-(3-mercaptopropyl)glycine]-, cyclic (7.fwdarw.9)-disulfide, [7(S),9(S)]- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 11

NTE modified (modifications unspecified)

type	location	description
bridge	Phe-7 - Gly-9	covalent bridge

SEQ 1 RPKPQMFFGL M

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

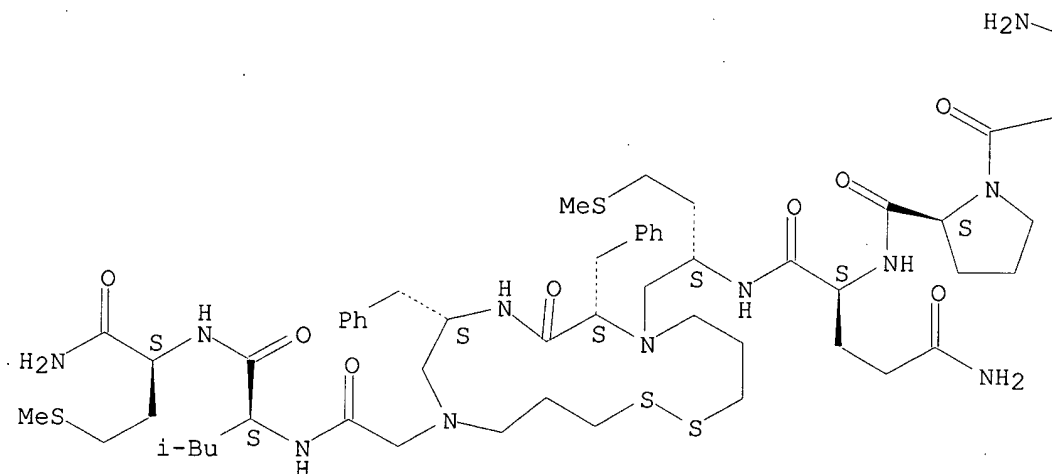
MF C69 H113 N17 O10 S4



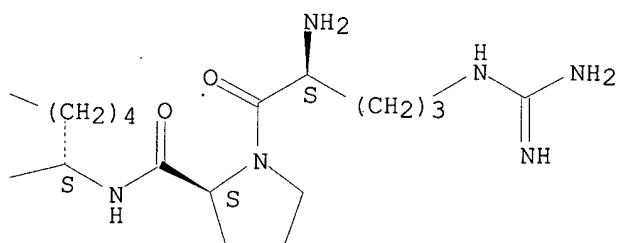
SR CA  
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

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PAGE 1-B



1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 125:266403

L18 ANSWER 14 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 182491-06-1 REGISTRY  
CN L-Methioninamide, N-[2-[[N-[2-[(L-arginyl-L-prolyl-L-lysyl-L-prolyl)amino]-4-(methylthio)butyl]-N-(3-mercaptopropyl)-L-methionyl-L-phenylalanyl-L-phenylalanyl]amino]ethyl]-N-(3-mercaptopropyl)-L-leucyl-, cyclic (5.fwdarw.8)-disulfide, (S)- (9CI) (CA INDEX NAME)  
FS PROTEIN SEQUENCE; STEREOSEARCH  
SQL 11  
NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge		Met-6	- Leu-10	covalent bridge

SEQ 1 RPKPMMFFGL M

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

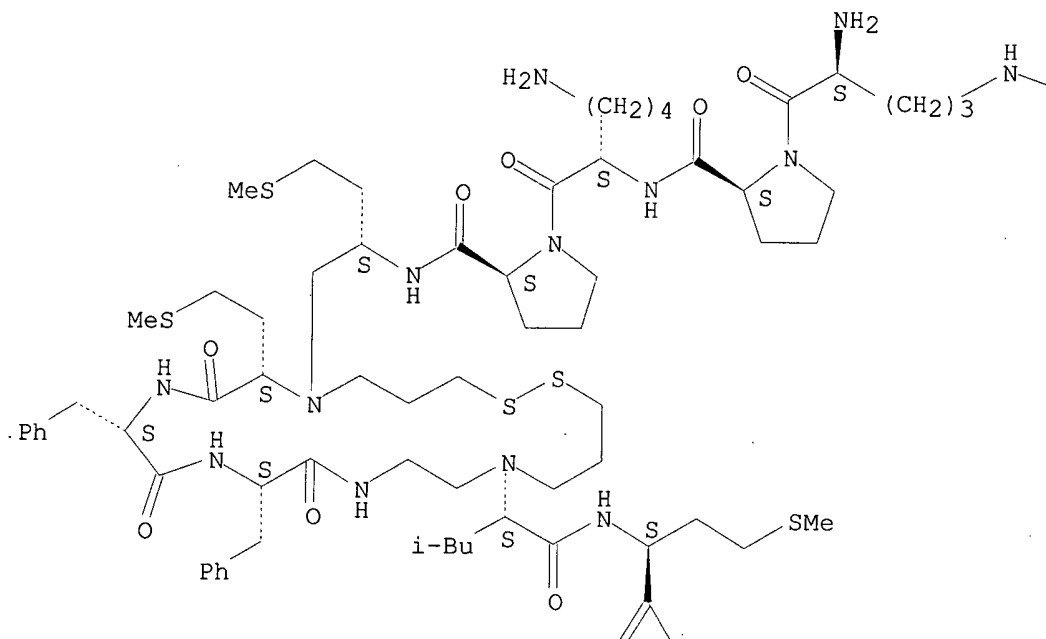
MF C69 H114 N16 O9 S5

SR CA

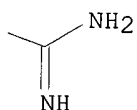
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

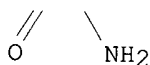
PAGE 1-A



PAGE 1-B



PAGE 2-A



1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 125:266403

L18 ANSWER 15 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 182491-04-9 REGISTRY

CN Substance P, 6-de-L-glutamine-7-[N-[2-amino-4-(methylthio)butyl]-N-(3-mercaptopropyl)-L-phenylalanine]-9-deglycine-10-[N-(2-aminoethyl)-N-(3-

mercaptopropyl)-L-leucine]-, cyclic (7.fwdarw.10)-disulfide, (S)- (9CI)  
(CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 11

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge	Phe-7	-	Leu-10	covalent bridge

SEQ 1 RPKPQMFFGL M

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

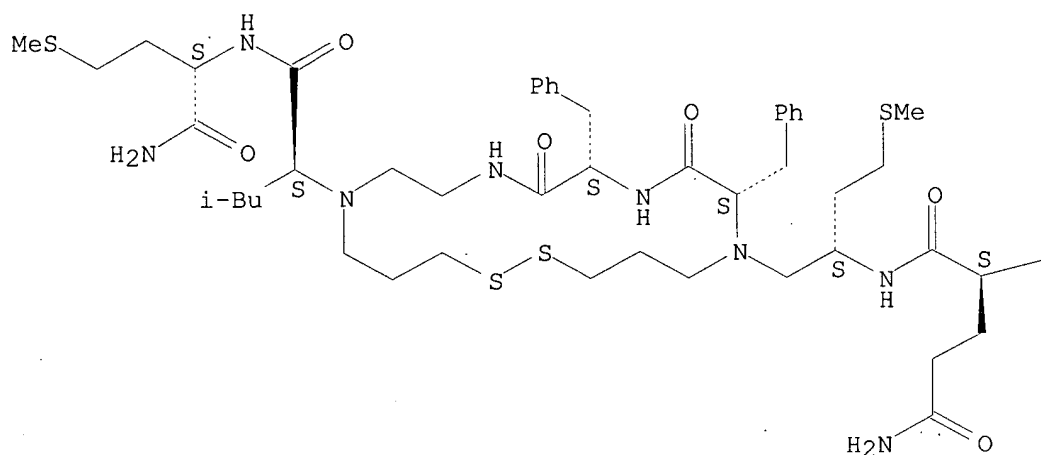
MF C69 H113 N17 O10 S4

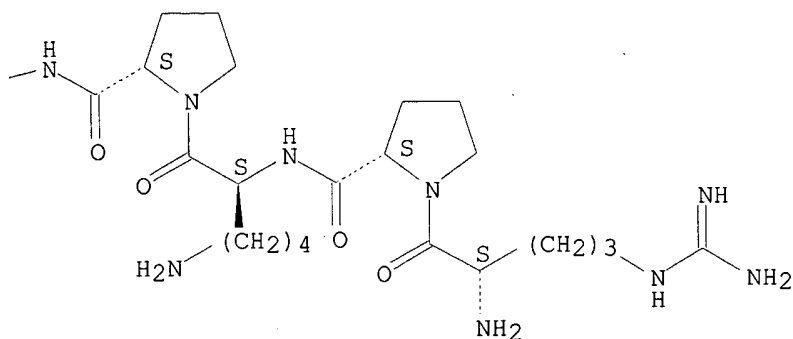
SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

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1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 125:266403

L18 ANSWER 16 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 182491-01-6 REGISTRY

CN Substance P, 7-de-L-phenylalanine-8-[N-(2-amino-3-phenylpropyl)-N-(3-mercaptopropyl)-L-phenylalanine]-9-deglycine-10-[N-(2-aminoethyl)-N-(3-mercaptopropyl)-L-leucine]-, cyclic (8.fwdarw.10)-disulfide, (S)- (9CI)  
(CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 11

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge	Phe-8	-	Leu-10	covalent bridge

SEQ 1 RPKPQQFFGL M

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

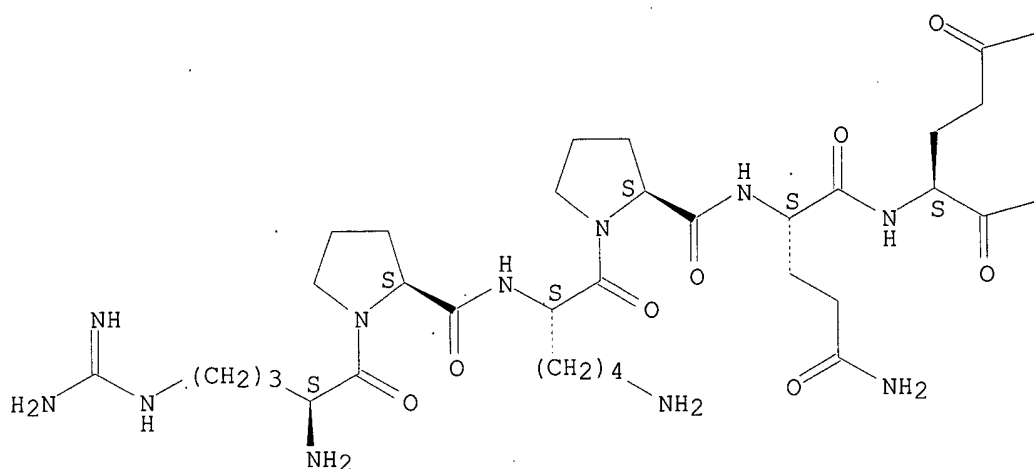
MF C69 H112 N18 O11 S3

SR CA

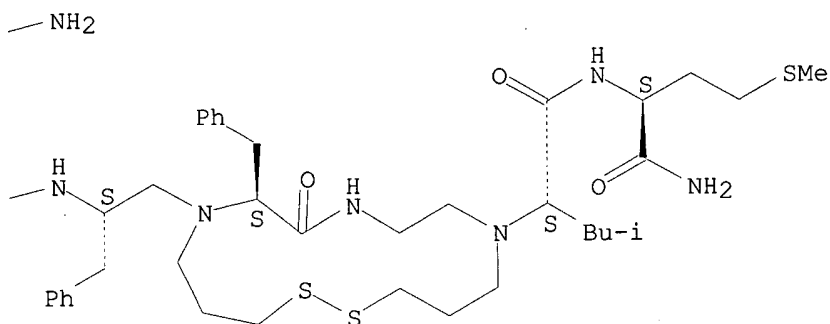
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

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1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 125:266403

L18 ANSWER 17 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 182490-98-8 REGISTRY  
 CN Glycinamide, N-[2-[(L-arginyl-L-prolyl-L-lysyl-L-prolyl)amino]-4-(methylthio)butyl]-N-(3-mercaptopropyl)-L-methionyl-L-phenylalanyl-L-phenylalanyl-N-[1-[[[1-(aminocarbonyl)-3-(methylthio)propyl](3-mercaptopropyl)amino]methyl]-3-methylbutyl]-, cyclic (5.fwdarw.8)-disulfide, [5(S),8[S(S)]]- (9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 11  
 NTE modified (modifications unspecified)

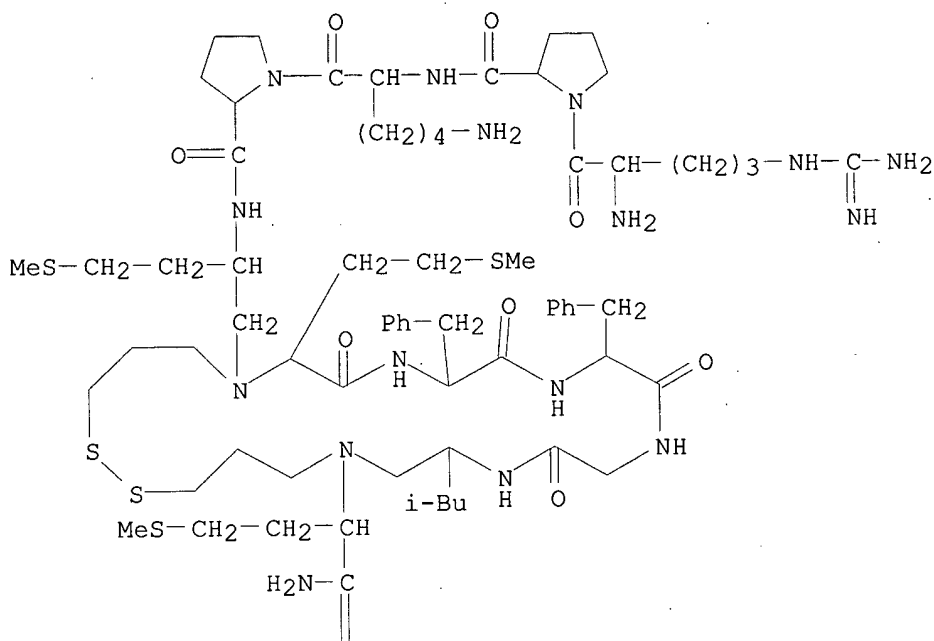
type	location	description
bridge	Met-6 - Met-11	covalent bridge

SEQ 1 RPKPMMFFGL M

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

MF C69 H114 N16 O9 S5  
 SR CA  
 LC STN Files: CA, CAPLUS

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1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 125:266403

L18 ANSWER 18 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 182490-95-5 REGISTRY

CN Substance P, 6-de-L-glutamine-7-[N-[2-amino-4-(methylthio)butyl]-N-(3-mercaptopropyl)-L-phenylalanine]-10-de-L-leucine-11-[N2-(2-amino-4-methylpentyl)-N2-(3-mercaptopropyl)-L-methioninamide]-, cyclic (7.fwdarw.11)-disulfide, [7(S),11(S)]- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 11

NTE modified (modifications unspecified)

type	location	description
bridge	Phe-7 - Met-11	covalent bridge

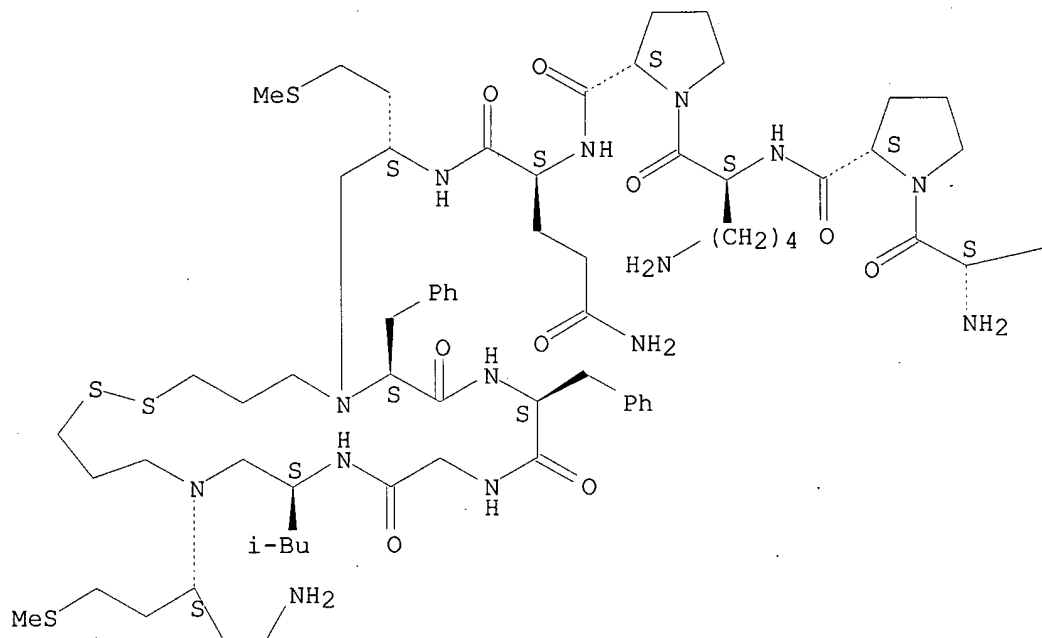
SEQ 1 RPKPQMFFGL M

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

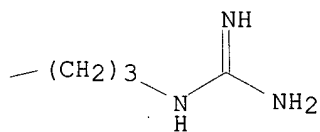
MF C69 H113 N17 O10 S4  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.

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1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 125:266403

L18 ANSWER 19 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 182490-91-1 REGISTRY  
 CN Substance P, 7-de-L-phenylalanine-8-[N-(2-amino-3-phenylpropyl)-N-(3-mercaptopropyl)-L-phenylalanine]-10-de-L-leucine-11-[N2-(2-amino-4-methylpentyl)-N2-(3-mercaptopropyl)-L-methioninamide]-, cyclic (8.fwdarw.11)-disulfide, [8(S),11(S)]- (9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 11  
 NTE modified (modifications unspecified)

type	location	description
bridge	Phe-8 - Met-11	covalent bridge

SEQ 1 RPKPQQFFGL M

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

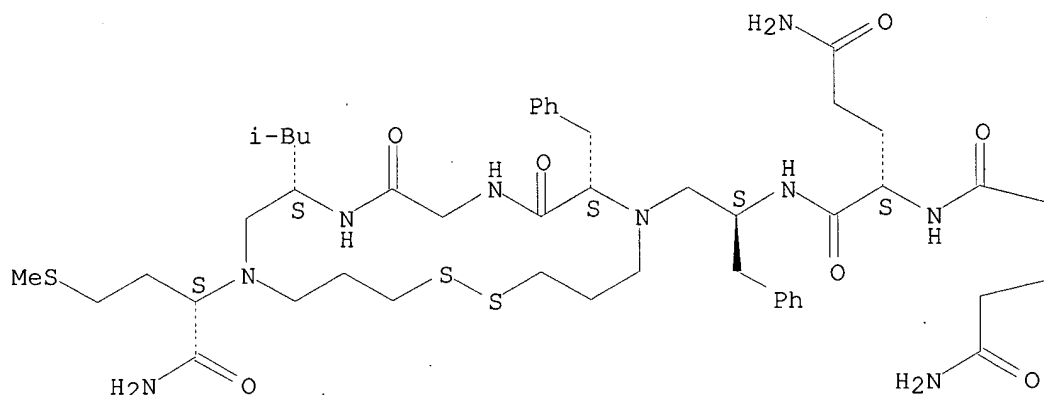
MF C69 H112 N18 O11 S3

SR CA

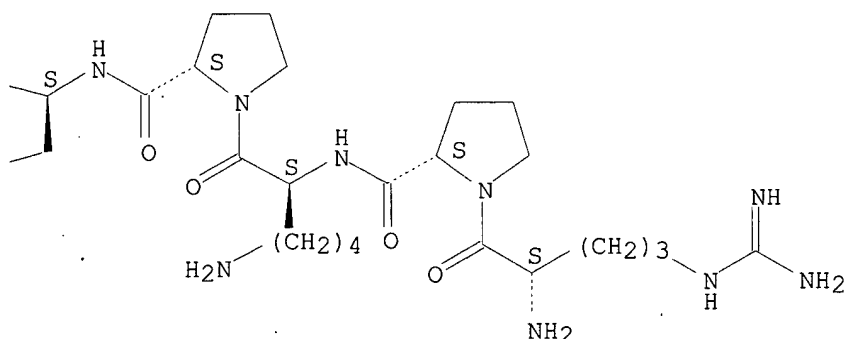
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

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1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 125:266403

L18 ANSWER 20 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 182490-86-4 REGISTRY  
 CN Substance P, 8-de-L-phenylalanine-9-[N-(2-amino-3-phenylpropyl)-N-(3-mercaptopropyl)glycine]-10-de-L-leucine-11-[N2-(2-amino-4-methylpentyl)-N2-(3-mercaptopropyl)-L-methioninamide]-, cyclic (9.fwdarw.11)-disulfide, [9(S),11(S)]- (9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 11  
 NTE modified (modifications unspecified)

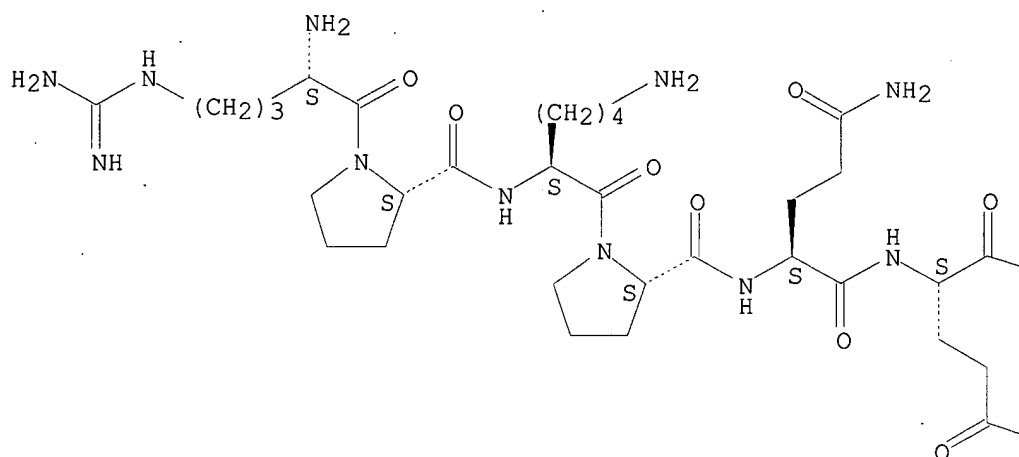
type	location	description
bridge	Gly-9 - Met-11	covalent bridge

SEQ 1 RPKPQQFFGL M

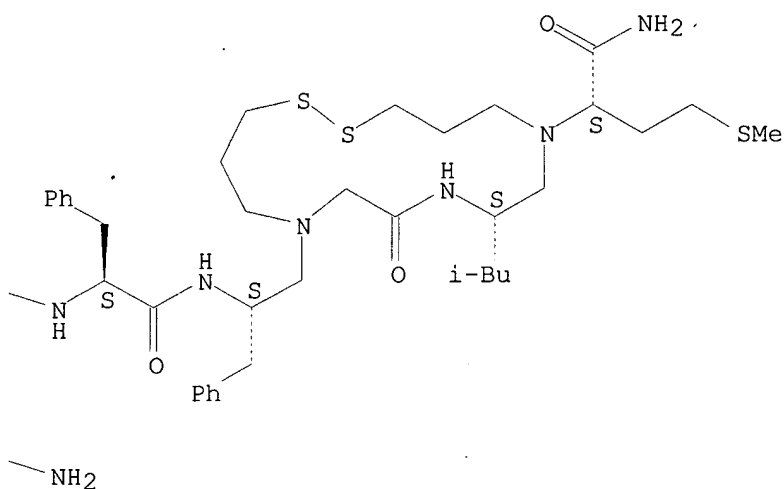
\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

MF C69 H112 N18 O11 S3  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.

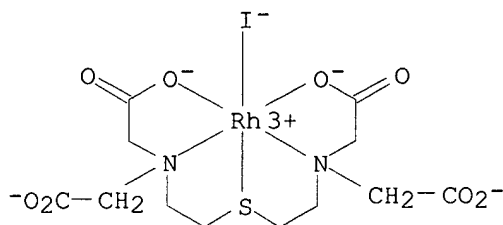


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REFERENCE 1: 125:266403

```
L18 ANSWER 21 OF 49  REGISTRY  COPYRIGHT 2003 ACS on STN
RN 174912-89-1  REGISTRY
CN Rhodate(2-), iodo[[N,N'-(thiodi-2,1-ethanediyl)bis[N-
(carboxymethyl)glycinato]](4-)-N,N',O,O',S]-, dihydrogen, dihydrate,
[OC-6-26-(R*,S*)]- (9CI) (CA INDEX NAME)
MF C12 H16 I N2 O8 Rh S . 2 H2 O . 2 H
CI CCS
SR CA
LC STN Files: CA, CAPLUS
```

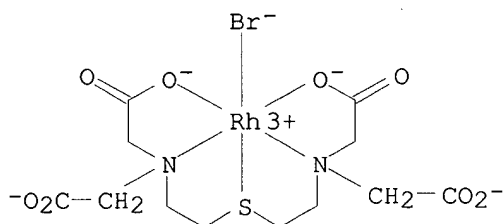
● 2 H<sup>+</sup>● 2 H<sub>2</sub>O

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 124:248760

L18 ANSWER 22 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 174912-88-0 REGISTRY  
 CN Rhodate(2-), bromo[[N,N'-(thiodi-2,1-ethanediyl)bis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',S]-, dihydrogen, [OC-6-26-(R\*,S\*)]- (9CI) (CA INDEX NAME)  
 MF C12 H16 Br N2 O8 Rh S . 2 H  
 CI CCS  
 SR CA  
 LC STN Files: CA, CAPLUS

● 2 H<sup>+</sup>

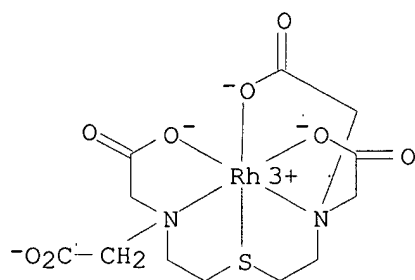
1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 124:248760

L18 ANSWER 23 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 174912-87-9 REGISTRY  
 CN Rhodate(1-), [[N,N'-(thiodi-2,1-ethanediyl)bis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',ON,S]-, hydrogen, trihydrate, [OC-6-25-(R\*,S\*)]- (9CI) (CA INDEX NAME)  
 MF C12 H16 N2 O8 Rh S . 3 H2 O . H

CI CCS  
SR CA  
LC STN Files: CA, CAPLUS



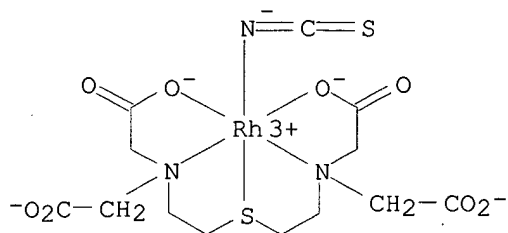
● H<sup>+</sup>

● 3 H<sub>2</sub>O

1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 124:248760

L18 ANSWER 24 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 174912-86-8 REGISTRY  
CN Rhodate(2-), (thiocyanato-N)[[N,N'-(thiodi-2,1-ethanediyl)bis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',S]-, dipotassium, dihydrate, [OC-6-23-(R\*,R\*)]- (9CI) (CA INDEX NAME)  
MF C13 H16 N3 O8 Rh S2 . 2 H2 O . 2 K  
CI CCS  
SR CA  
LC STN Files: CA, CAPLUS



● 2 K<sup>+</sup>

● 2 H<sub>2</sub>O

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 124:248760

L18 ANSWER 25 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 174912-85-7 REGISTRY

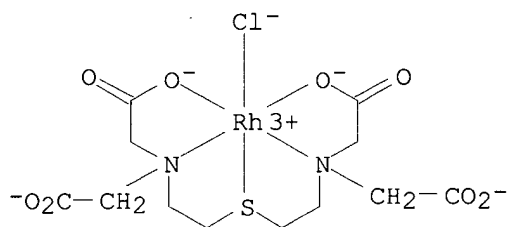
CN Rhodate(2-), chloro[[N,N'-(thiodi-2,1-ethanediyl)bis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',S]-, dihydrogen, monohydrate, [OC-6-26-(R\*,S\*)]- (9CI) (CA INDEX NAME)

MF C12 H16 Cl N2 O8 Rh S . H2 O . 2 H

CI CCS

SR CA

LC STN Files: CA, CAPLUS



● 2 H<sup>+</sup>

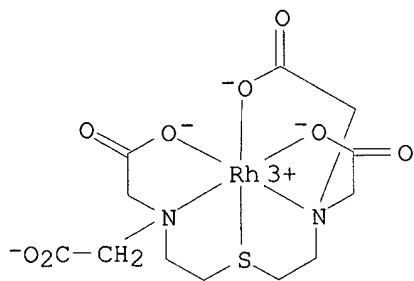
● H<sub>2</sub>O

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 124:248760

L18 ANSWER 26 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 174912-84-6 REGISTRY  
CN Rhodate(1-), [[N,N'-(thiodi-2,1-ethanediyl)bis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',ON,S]-, hydrogen, dihydrate,  
[OC-6-25-(R\*,S\*)]- (9CI) (CA INDEX NAME)  
MF C12 H16 N2 O8 Rh S . 2 H2 O . H  
CI CCS  
SR CA  
LC STN Files: CA, CAPLUS



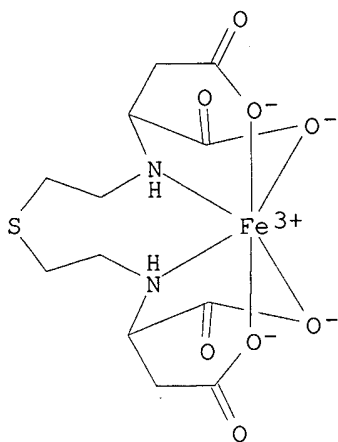
● H<sup>+</sup>

● 2 H<sub>2</sub>O

1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 124:248760

L18 ANSWER 27 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 168201-05-6 REGISTRY  
CN Ferrate(1-), [[N,N'-(thiodi-2,1-ethanediyl)bis[L-aspartato]](4-)]-,  
hydrogen (9CI) (CA INDEX NAME)  
MF C12 H16 Fe N2 O8 S . H  
CI CCS  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL



● H<sup>+</sup>

2 REFERENCES IN FILE CA (1947 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 124:41276

REFERENCE 2: 123:213013

L18 ANSWER 28 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 159105-49-4 REGISTRY

CN L-Tyrosine, N-[2-[[N-(2-amino-4-methylpentyl)-N-(3-mercaptopropyl)-L-seryl-L-prolylglycyl-L-lysyl]amino]-3-methylbutyl]-N-(3-mercaptopropyl)-L-alanyl-L-prolyl-L-lysyl-, cyclic (1.fwdarw.5)-disulfide, monohydrofluoride, [1(S),5(S)]- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 10

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge	Ser-2	-	Ala-7	covalent bridge

SEQ 1 LSPGKVAPKY

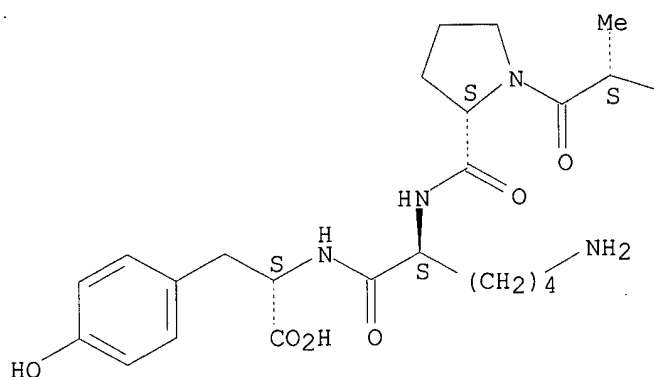
MF C56 H96 N12 O11 S2 . F H

SR CA

LC STN Files: CA, CAPLUS

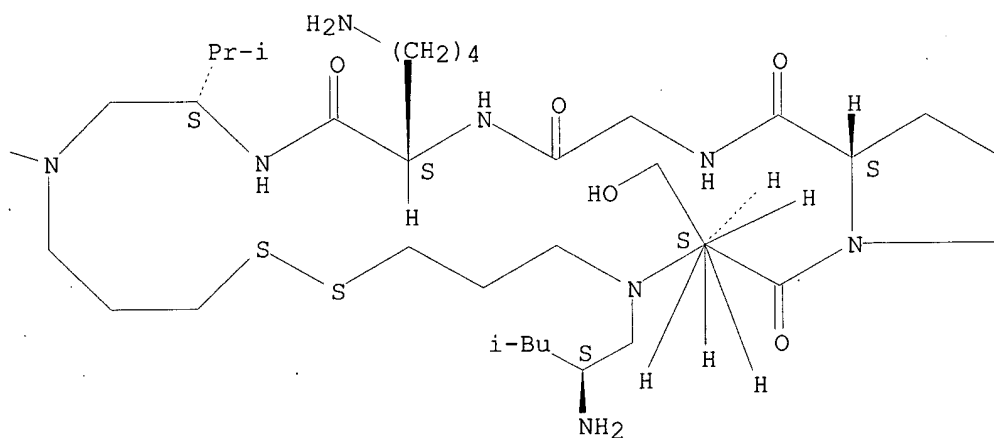
Absolute stereochemistry.

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● HF

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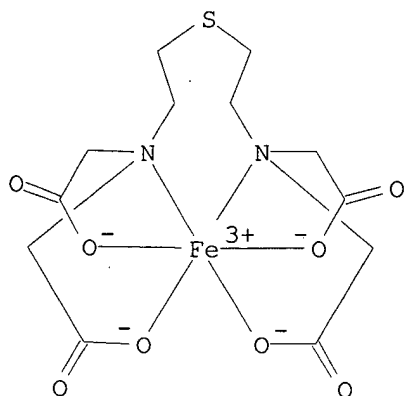


1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 121:301276

L18 ANSWER 29 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 148354-20-5 REGISTRY  
 CN Ferrate(1-), [[N,N'-(thiodi-2,1-ethanediyl)bis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',ON,ON']-, hydrogen, (OC-6-21)-(9CI) (CA INDEX NAME)  
 MF C12 H16 Fe N2 O8 S . H  
 CI CCS  
 SR CA  
 LC STN Files: CA, CAPLUS



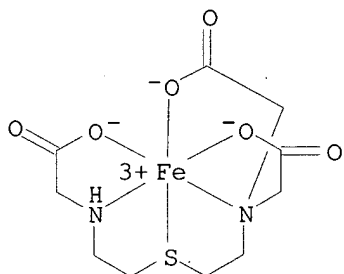


● H<sup>+</sup>

1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 119:37403

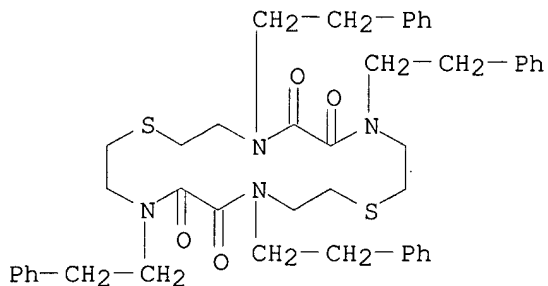
L18 ANSWER 30 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 146110-27-2 REGISTRY  
CN Iron, [N-[2-[[2-[bis(carboxymethyl)amino]ethyl]thio]ethyl]glycinato(3-)]-(9CI) (CA INDEX NAME)  
MF C10 H15 Fe N2 O6 S  
CI CCS  
SR CA  
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 118:112883

L18 ANSWER 31 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 145644-73-1 REGISTRY  
CN 1,10-Dithia-4,7,13,16-tetraazacyclooctadecane-5,6,14,15-tetrone, 4,7,13,16-tetrakis(2-phenylethyl)- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C44 H52 N4 O4 S2  
SR CA  
LC STN Files: BEILSTEIN\*, CA, CAPLUS  
(\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 118:80910

L18 ANSWER 32 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 129524-56-7 REGISTRY

CN Ferrate(4-), bis[.mu.-[[N,N'-(dithiodi-2,1-ethanediyl)bis[N-(carboxymethyl)glycinato]](4-)-N,O,ON:N',O',ON']]di- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

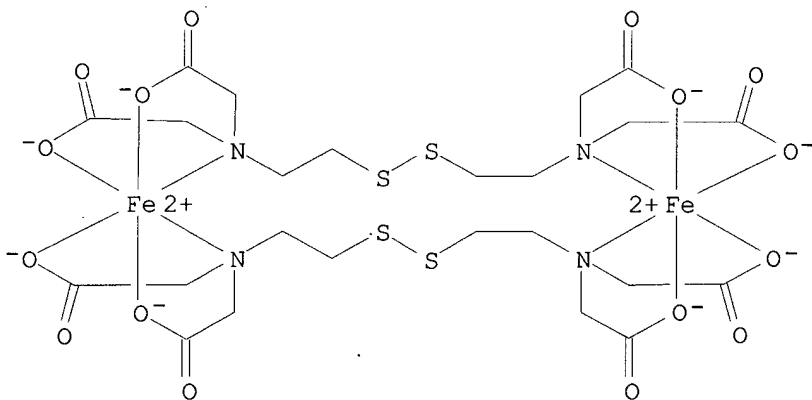
CN Glycine, N,N'-(dithio-1,2-ethanediyl)bis[N-(carboxymethyl)-, iron complex

MF C24 H32 Fe2 N4 O16 S4

CI CCS

SR CA

LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 113:139830

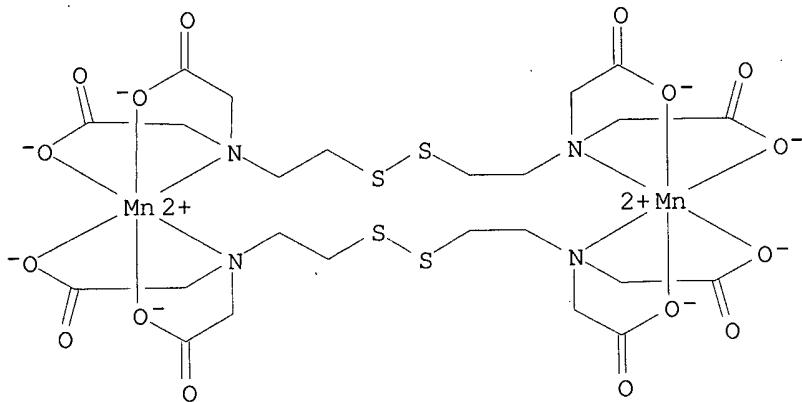
L18 ANSWER 33 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 129500-47-6 REGISTRY

CN Manganate(4-), bis[.mu.-[[N,N'-(dithiodi-2,1-ethanediyl)bis[N-(carboxymethyl)glycinato]](4-)-N,O,ON:N',O',ON']]di- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Glycine, N,N'-(dithiodi-2,1-ethanediyl)bis[N-(carboxymethyl)-, manganese complex  
 MF C24 H32 Mn2 N4 O16 S4  
 CI CCS  
 SR CA  
 LC STN Files: CA, CAPLUS



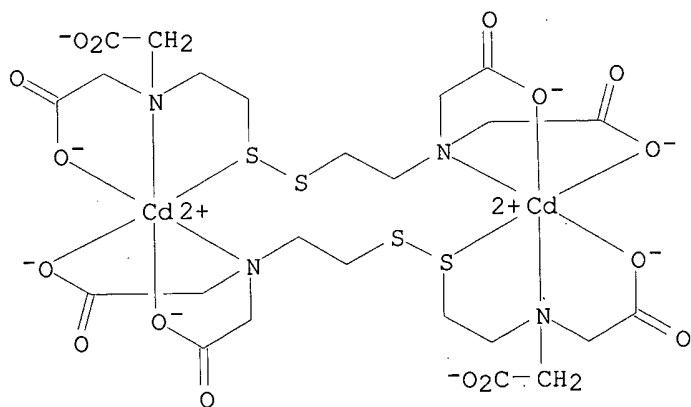
1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 113:139830

L18 ANSWER 34 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 129500-46-5 REGISTRY  
 CN Cadmate(4-), bis[.mu.-[[N,N'-(dithio-2,1-ethanediyl)bis[N-(carboxymethyl)glycinato]](4-)]di- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Glycine, N,N'-(dithiodi-2,1-ethanediyl)bis[N-(carboxymethyl)-, cadmium complex  
 MF C24 H32 Cd2 N4 O16 S4  
 CI CCS  
 SR CA  
 LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 113:139830

L18 ANSWER 35 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 129500-45-4 REGISTRY

CN Zincate(4-), bis[.mu.-[[N,N'-(dithio-2,1-ethanediyl)bis[N-(carboxymethyl)glycinato]](4-))]di- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

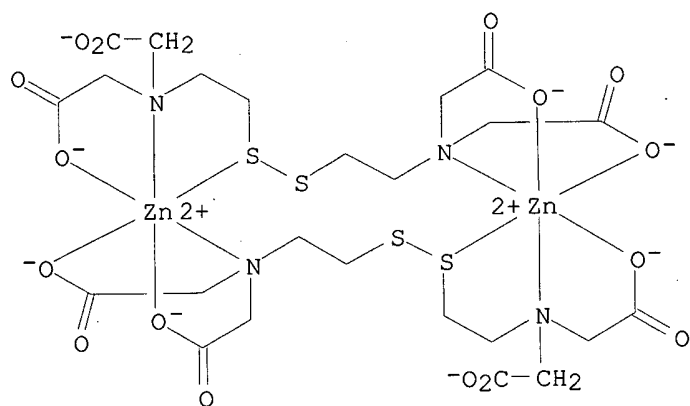
CN Glycine, N,N'-(dithiodi-2,1-ethanediyl)bis[N-(carboxymethyl)-, zinc complex

MF C24 H32 N4 O16 S4 Zn2

CI CCS

SR CA

LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 113:139830

L18 ANSWER 36 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 129500-44-3 REGISTRY

CN Cuprate(4-), bis[.mu.-[[N,N'-(dithio-2,1-ethanediyl)bis[N-(carboxymethyl)glycinato]](4-))]di- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

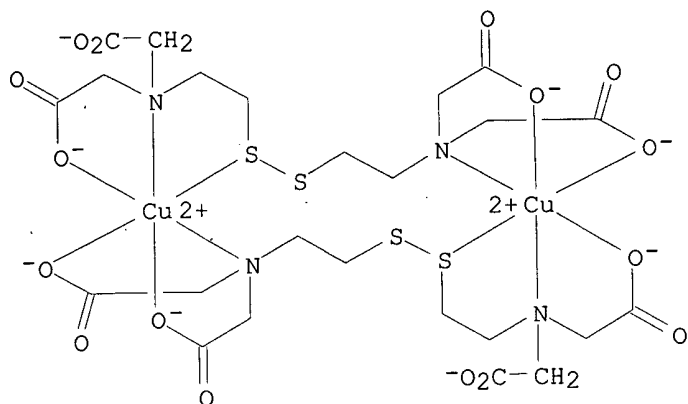
CN Glycine, N,N'-(dithiodi-2,1-ethanediyl)bis[N-(carboxymethyl)-, copper complex

MF C24 H32 Cu2 N4 O16 S4

CI CCS

SR CA

LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 113:139830

L18 ANSWER 37 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 129500-43-2 REGISTRY

CN Nickelate(4-), bis[.mu.-[[N,N'-(dithio-2,1-ethanediyl)bis[N-(carboxymethyl)glycinato]](4-)]di- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

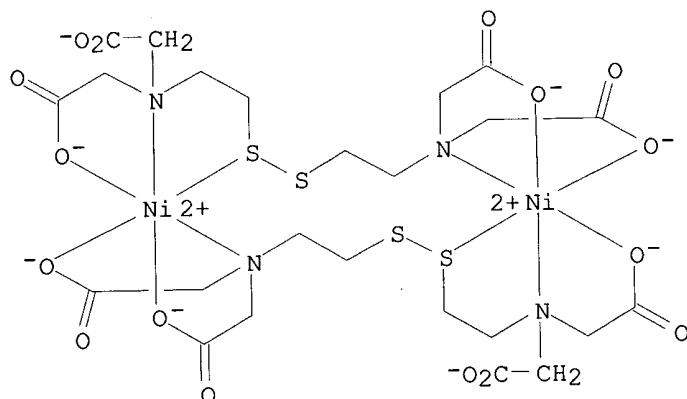
CN Glycine, N,N'-(dithiodi-2,1-ethanediyl)bis[N-(carboxymethyl)-, nickel complex

MF C24 H32 N4 Ni2 O16 S4

CI CCS

SR CA

LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 113:139830

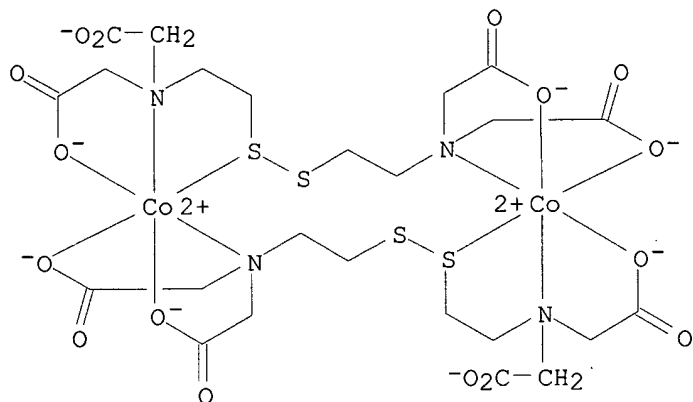
L18 ANSWER 38 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 129500-42-1 REGISTRY

CN Cobaltate(4-), bis[.mu.-[[N,N'-(dithio-2,1-ethanediyl)bis[N-(carboxymethyl)glycinato]](4-)]di- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Glycine, N,N'-(dithiodi-2,1-ethanediyl)bis[N-(carboxymethyl)-, cobalt complex  
 MF C24 H32 Co2 N4 O16 S4  
 CI CCS  
 SR CA  
 LC STN Files: CA, CAPLUS

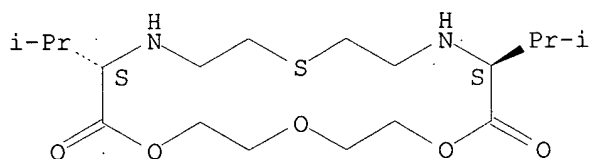


1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 113:139830

L18 ANSWER 39 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 127357-20-4 REGISTRY  
 CN 1,4,7-Trioxa-13-thia-10,16-diazacyclooctadecane-8,18-dione,  
 9,17-bis(1-methylethyl)-, [9S-(9R\*,17R\*)]- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C18 H34 N2 O5 S  
 SR CA  
 LC STN Files: CA, CAPLUS, CASREACT

Absolute stereochemistry.



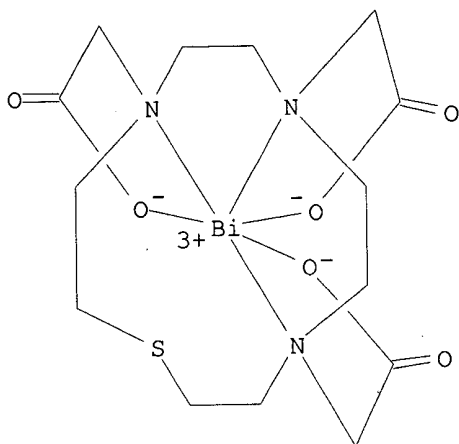
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 113:22715

L18 ANSWER 40 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 122597-02-8 REGISTRY  
 CN Bismuth, [1-thia-4,7,10-triazacyclododecane-4,7,10-triacetato(3-)-  
 N4,N7,N10,O4,O7,O10]- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 1-Thia-4,7,10-triazacyclododecane, bismuth deriv.

CN 1-Thia-4,7,10-triazacyclododecane-4,7,10-triacetic acid, bismuth complex  
 MF C14 H22 Bi N3 O6 S  
 CI CCS  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

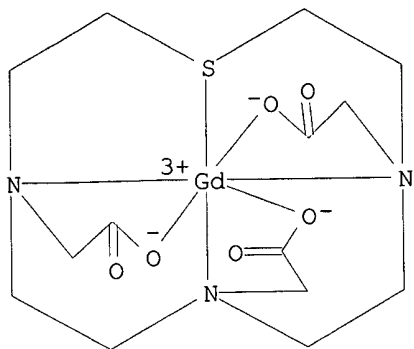
REFERENCE 1: 111:233674

L18 ANSWER 41 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 122596-99-0 REGISTRY  
 CN Manganate(1-), [1-thia-4,7,10-triazacyclododecane-4,7,10-triacetato(3-)-  
 N4,N7,N10,O4,O7,O10]-, hydrogen (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 1-Thia-4,7,10-triazacyclododecane, manganate(1-) deriv.  
 CN 1-Thia-4,7,10-triazacyclododecane-4,7,10-triacetic acid, manganese complex  
 MF C14 H22 Mn N3 O6 S . H  
 CI CCS  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
 1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 111:233674

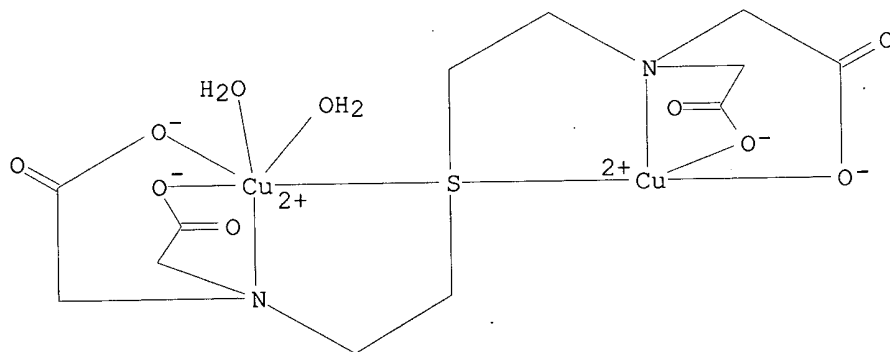
L18 ANSWER 42 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 122596-98-9 REGISTRY  
 CN Gadolinium, [1-thia-4,7,10-triazacyclododecane-4,7,10-triacetato(3-)-  
 N4,N7,N10,O4,O7,O10,S1]- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 1-Thia-4,7,10-triazacyclododecane, gadolinium deriv.  
 CN 1-Thia-4,7,10-triazacyclododecane-4,7,10-triacetic acid, gadolinium  
 complex  
 MF C14 H22 Gd N3 O6 S  
 CI CCS  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 111:233674

L18 ANSWER 43 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 101348-83-8 REGISTRY  
CN Copper, diaqua[.mu.-[[N,N'-(thiodi-2,1-ethanediyl)bis[N-(carboxymethyl)glycinato]](4-)-N,O,ON,S:N',O',ON',S]]di-, trihydrate (9CI)  
(CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Glycine, N,N'-(thiodi-2,1-ethanediyl)bis[N-(carboxymethyl)-, copper complex  
MF C12 H20 Cu2 N2 O10 S . 3 H2 O  
CI CCS  
SR CA  
LC STN Files: CA, CAPLUS



● 3 H<sub>2</sub>O

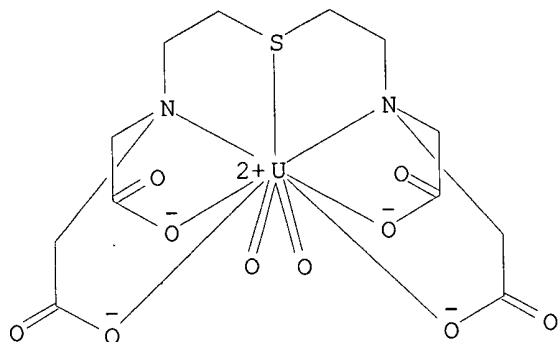
1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 104:218052

L18 ANSWER 44 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 95294-14-7 REGISTRY



CN Uranium, dioxo[dihydrogen [thiobis(ethylenenitrilo)]tetraacetato]- (7CI)  
 (CA INDEX NAME)  
 MF C12 H16 N2 O10 S U . 2 H  
 CI CCS  
 LC STN Files: CA, CAOLD, CAPLUS



● 2 H<sup>+</sup>

1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)  
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 62:36434

L18 ANSWER 45 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 71031-50-0 REGISTRY

CN Chromate(2-), aqua[.mu.-[[N,N'-(thiodi-2,1-ethanediyl)bis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',ON:ON']][[N,N'-(thiodi-2,1-ethanediyl)bis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',ON]di- (9CI)  
 (CA INDEX NAME)

OTHER CA INDEX NAMES:

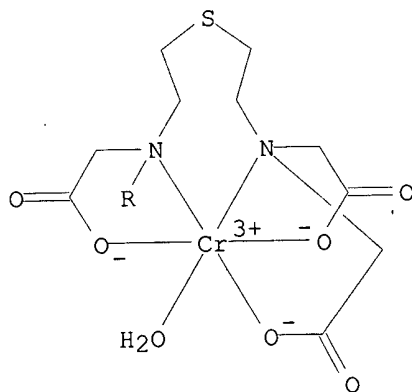
CN Glycine, N,N'-(thiodi-2,1-ethanediyl)bis[N-(carboxymethyl)-, chromium complex

MF C24 H34 Cr2 N4 O17 S2

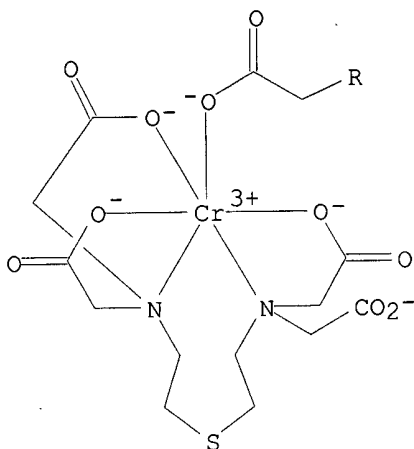
CI CCS

LC STN Files: CA, CAPLUS, TOXCENTER

PAGE 1-A



PAGE 2-A



1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 91:133280

L18 ANSWER 46 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 70983-10-7 REGISTRY

CN Chromate(1-), [[N,N'-(thiodi-2,1-ethanediyl)bis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',ON,S]-, hydrogen, (OC-6-23)-(9CI) (CA INDEX NAME)

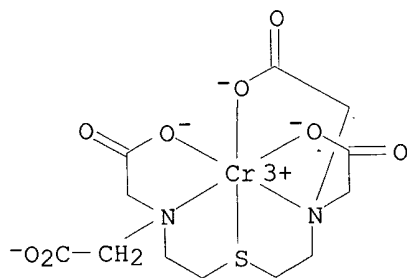
OTHER CA INDEX NAMES:

CN Glycine, N,N'-(thiodi-2,1-ethanediyl)bis[N-(carboxymethyl)-, chromium complex

MF C12 H16 Cr N2 O8 S . H

CI CCS

LC STN Files: CA, CAPLUS, TOXCENTER



● H<sup>+</sup>

2 REFERENCES IN FILE CA (1947 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1947 TO DATE)

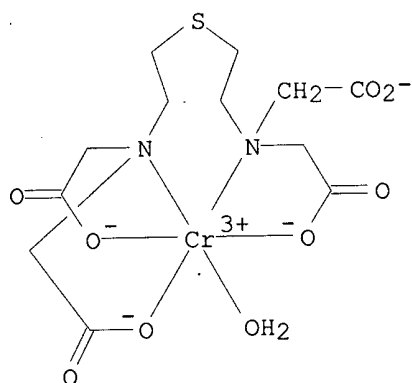
REFERENCE 1: 92:84850

REFERENCE 2: 91:133280

L18 ANSWER 47 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 70983-09-4 REGISTRY  
 CN Chromate(1-), aqua[[N,N'-(thiodi-2,1-ethanediyl)bis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',ON]-, hydrogen (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Glycine, N,N'-(thiodi-2,1-ethanediyl)bis[N-(carboxymethyl)-, chromium complex  
 MF C12 H18 Cr N2 O9 S . H  
 CI CCS  
 LC STN Files: CA, CAPLUS, TOXCENTER



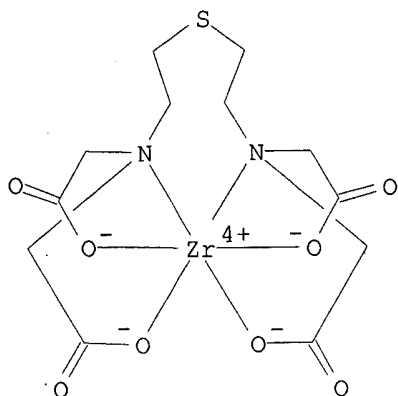
● H<sup>+</sup>

2 REFERENCES IN FILE CA (1947 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 92:84850

REFERENCE 2: 91:133280

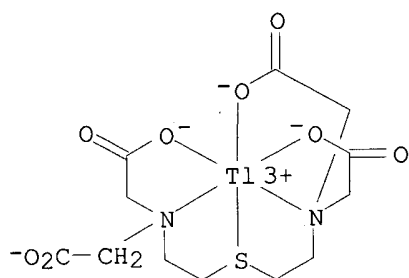
L18 ANSWER 48 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 16871-74-2 REGISTRY  
 CN Zirconium, [[thiobis(ethylenenitrilo)]tetraacetato]- (8CI) (CA INDEX NAME)  
 MF C12 H16 N2 O8 S Zr  
 CI CCS  
 LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 67:17469

L18 ANSWER 49 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 15977-96-5 REGISTRY  
CN Thallium, [hydrogen [thiobis(ethylenenitrilo)]tetraacetato]- (8CI) (CA  
INDEX NAME)  
MF C12 H16 N2 O8 S Tl . H  
CI CCS  
LC STN Files: CA, CAPLUS



● H<sup>+</sup>

1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 66:119393

=> fil hcaplus  
 FILE 'HCAPLUS' ENTERED AT 12:00:51 ON ~~22 JUL 2003~~  
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FILE COVERS 1907 - 22 Jul 2003 VOL 139 ISS 4  
 FILE LAST UPDATED: 21 Jul 2003 (20030721/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L20      42 SEA FILE=REGISTRY ABB=ON PLU=ON FWWKTFG/SQSP
L22      11 SEA FILE=HCAPLUS ABB=ON PLU=ON L20
L23     5224 SEA FILE=REGISTRY ABB=ON PLU=ON SOMATO?
L24    89156 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 OR ?SOMATO?
L25      10 SEA FILE=HCAPLUS ABB=ON PLU=ON L22 AND L24
L27     467 SEA FILE=REGISTRY ABB=ON PLU=ON [FA][YAF]WK[TVSC].[GAF]/SQSP

L34     397 SEA FILE=REGISTRY ABB=ON PLU=ON L27 AND SQL>=7
L35     127 SEA FILE=REGISTRY ABB=ON PLU=ON L34 AND (CYCL? OR BRID? OR
MULTICHA?)
L36     46 SEA FILE=HCAPLUS ABB=ON PLU=ON L35
L37     41 SEA FILE=HCAPLUS ABB=ON PLU=ON L36 AND L24
L38     41 SEA FILE=HCAPLUS ABB=ON PLU=ON L37 NOT L25
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L44    15240 SEA FILE=REGISTRY ABB=ON PLU=ON L43 AND SQL>=7
L54     72 SEA FILE=REGISTRY ABB=ON PLU=ON L44 AND SQL=7
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L56     27 SEA FILE=HCAPLUS ABB=ON PLU=ON L55 AND L24
L57     18 SEA FILE=HCAPLUS ABB=ON PLU=ON L56 NOT (L25 OR L38)
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L70     7 SEA FILE=HCAPLUS ABB=ON PLU=ON L69
L74     1 SEA FILE=REGISTRY ABB=ON PLU=ON FCFWWKTFG/SQSP
L75     4 SEA FILE=HCAPLUS ABB=ON PLU=ON L74
L78     33 SEA FILE=REGISTRY ABB=ON PLU=ON FCFWKTCF/SQSP
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L80     13 SEA FILE=HCAPLUS ABB=ON PLU=ON L79 NOT (L25 OR L38 OR L57 OR
L75 OR L70)
L82    279 SEA FILE=REGISTRY ABB=ON PLU=ON [FA]C.WK.C[GVF]FA|[FA]C.WK.C[
FA]/SQSP
L83    278 SEA FILE=REGISTRY ABB=ON PLU=ON L82 AND SQL>=8
L84    102 SEA FILE=HCAPLUS ABB=ON PLU=ON L83
L85     90 SEA FILE=HCAPLUS ABB=ON PLU=ON L84 AND L24
L86     64 SEA FILE=HCAPLUS ABB=ON PLU=ON L85 NOT (L25 OR L38 OR L57 OR
L75 OR L70 OR L80)
L87     47 SEA FILE=HCAPLUS ABB=ON PLU=ON L86 AND PD<=DECEMBER 13, 2000
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L87 ANSWER 1 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:894630 HCAPLUS

DOCUMENT NUMBER: 134:141903

TITLE: Identification and exploitation of structural foci that influence conformational mobility in **somatostatin** agonists and antagonists

AUTHOR(S): Morgan, Barry; Anderson, Warren; Coy, David; Culler, Michael; MacArthur, Malcolm; Mierke, Dale; Pellegrini, Maria; Piserchio, Andrea; Allee, Dean Sadat; Taylor, John

CORPORATE SOURCE: Biomeasure, Inc., Milford, MA, 01757, USA

SOURCE: Peptides for the New Millennium, Proceedings of the American Peptide Symposium, 16th, Minneapolis, MN, United States, June 26-July 1, 1999 (2000), Meeting Date 1999, 245-247. Editor(s): Fields, Gregg B.; Tam, James P.; Barany, George. Kluwer Academic Publishers: Dordrecht, Neth.

CODEN: 69ATHX

DOCUMENT TYPE: Conference

LANGUAGE: English

AB The **somatostatin** (ss) agonist BIM-23023, and the recently described **somatostatin** antagonist BIM-23454, have modest selectivity for hSSTR2 and the authors were interested in exploring the relationship between structure and function with respect to affinity for, and efficacy at alternative **somatostatin** receptor subtypes. The authors carried out a retrospective anal. on structural data from the Cambridge crystallog. database (CCD), and the Protein Database (PDB) for peptides contg. a CXXXXC fragment. The authors have also carried out structural studies using NMR methods on BIM-23023 and 23454 in both DMSO, and water contg. dodecylphosphocholine (DPC), and compared these structures to those obtained by crystallog. methods. The authors found that peptides contg. a CXXXXC sequence adopt a closely related series of "helix" conformations in the crystal state, and have found by NMR methods that this conformation is also adopted by SS agonists in aq. DPC media. The authors hypothesize that this event "primes" the peptide in a conformation appropriate for receptor binding. The authors find that an SS antagonist exists in multiple conformational states in DPC, and have shown that modification at the i+3 position of the .beta.-II' turn of this analog can reverse hSSTR2/5 selectivity and restore efficacy. The conformational basis for this reversal of selectivity and restoration of agonist character is currently under investigation.

IT 51110-01-1D, **Somatostatin**, analogs 243470-86-2, BIM 23454

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)  
(identification and exploitation of structural foci that influence conformational mobility in **somatostatin** agonists and antagonists)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L87 ANSWER 2 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:812949 HCAPLUS

DOCUMENT NUMBER: 134:13526

TITLE: **Somatostatin** receptor subtype-5 mediates

inhibition of peptide YY secretion from rat intestinal cultures  
 AUTHOR(S): Chisholm, Connie; Greenberg, Gordon R.  
 CORPORATE SOURCE: Department of Medicine and Physiology, University of Toronto, Toronto, ON, M5S 1A8, Can.  
 SOURCE: American Journal of Physiology (2000), 279(5, Pt. 1), G983-G989  
 CODEN: AJPHAP; ISSN: 0002-9513  
 PUBLISHER: American Physiological Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB **Somatostatin-14 (S-14) and somatostatin-28 (S-28)** bind to five distinct membrane receptors (SSTRs), but S-28 has higher affinity for SSTR-5. Whether S-28 acting through SSTR-5 regulates inhibition of peptide YY (PYY) secretion was tested in fetal rat intestinal cell cultures. S-28 and S-14 caused dose-dependent inhibition of PYY secretion stimulated by gastrin-releasing peptide, but S-28 was more potent than S-14 (EC50 0.04 vs. 13.2 nM). PYY was inhibited by two analogs with affinity for SSTR-5, BIM-23268 and BIM-23052, more potently than S-14 and as effectively as S-28. The SSTR-5 analog L-362855 suppressed PYY equiv. only to S-14, but the structurally related peptide L-372588 (Phe to Tyr at position 2) was equipotent to S-28, whereas L-372587 (Phe to Tyr at position 7) caused no inhibition. An SSTR-2 analog decreased PYY secretion similar to S-14, and an SSTR-3 analog was ineffective. PYY secretion stimulated by phorbol 12-myristate 13-acetate and by forskolin was also more potently suppressed by S-28 and the octapeptide SSTR-5 analogs. The results indicate that S-28 mediates inhibition of gastrin-releasing peptide-stimulated PYY secretion through activation of SSTR-5 and includes suppression of cAMP- and protein kinase C-dependent pathways. Substitution of a single hydroxyl group confers differences in SSTR-5 agonist properties, suggesting region specificity for the intrinsic activity of this receptor subtype.

IT **163687-44-3, NC 8-12**  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)  
 (somatostatin SSTR-5 receptor agonist structure-activity relations for inhibition of peptide YY secretion in rat intestinal cultures)

IT **51110-01-1, Somatostatin-14 75037-27-3, Somatostatin-28**  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)  
 (somatostatin-28 inhibition of gastrin-releasing peptide-stimulated peptide YY secretion through activation of SSTR-5 includes suppression of cAMP- and protein kinase C-dependent pathways in rat intestinal cultures)

REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L87 ANSWER 3 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:524735 HCAPLUS

DOCUMENT NUMBER: 131:295720

TITLE: Urethane-induced **somatostatin** mediated inhibition of gastric acid: reversal by the **somatostatin** 2 receptor antagonist, PRL-2903

AUTHOR(S): Kawakubo, Keishi; Coy, David H.; Walsh, John H.; Tache, Yvette

CORPORATE SOURCE: CURE: Digestive Diseases Research Center, VA Medical Center West Los Angeles, Department of Medicine, Division of Digestive Diseases, UCLA, Los Angeles, CA, 90073, USA

SOURCE: Life Sciences (1999), 65(10), PL115-PL120  
 CODEN: LIFSAK; ISSN: 0024-3205

PUBLISHER: Elsevier Science Inc.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Urethane increases the release of **somatostatin** (SRIF) which inhibits gastric acid secretion. The SRIF monoclonal antibody, CURE.S6 and the novel sst2 antagonist, PRL-2903 injected i.v. at maximal EDs increased gastric acid secretion by 2 and 10 fold resp. from basal values within 30 min in urethane-anesthetized rats. Plasma gastrin levels were elevated 2.5 fold within 15 min by PRL-2903 (1.3 .mu.mol/kg, iv). These data indicate that the low gastrin and acid secretion levels induced by urethane result from endogenous SRIF acting on sst2 and that PRL-2903 is a valuable SRIF antagonist to assess sst2 mediated events.

IT 209006-12-2, PRL 2903

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(**somatostatin** 2 receptor mediation of **somatostatin**  
 -induced gastrin-dependent inhibition of gastric acid secretion:  
 PRL-2903 use as assessment tool)

IT 51110-01-1, **Somatostatin**

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(**somatostatin** 2 receptor mediation of **somatostatin**  
 -induced gastrin-dependent inhibition of gastric acid secretion:  
 PRL-2903 use as assessment tool)

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L87 ANSWER 4 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:396636 HCAPLUS

DOCUMENT NUMBER: 131:208607

TITLE: **Somatostatin** receptor antagonists based on a mixed neuromedin B antagonist/**somatostatin** agonist

AUTHOR(S): Coy, David H.; Jain, Rahul; Murphy, William A.; Rossowski, Wojciech J.; Fuselier, Joseph; Taylor, John E.

CORPORATE SOURCE: Peptide Research Laboratories, Department of Medicine, Tulane University Medical Center, New Orleans, LA, 70112, USA

SOURCE: Peptides: Frontiers of Peptide Science, Proceedings of the American Peptide Symposium, 15th, Nashville, June 14-19, 1997 (1999), Meeting Date 1997, 526-529. Editor(s): Tam, James P.; Kaumaya, Pravin T. P. Kluwer: Dordrecht, Neth.

CODEN: 67UCAR

DOCUMENT TYPE: Conference

LANGUAGE: English

AB The **somatostatin**-antagonizing activities are reported for 19 analogs of D-Nal-Cys-Tyr-D-Trp-Lys-Val-Cys-Nal-NH<sub>2</sub>. The high potencies in this type of type-2 receptor-specific **somatostatin** antagonists reside in the use of optimized arom. amino acid structures in positions 1 and 8. It was thought that the ability of these side-chains to form .pi.-.pi. complexes might offer an explanation for these results. However, mol. modeling studies in progress on these octapeptides suggest little possibility that this occurs. The D-Cys<sub>2</sub> residue appears to force rotation of the position 1 side chains so that they protrude in the opposite direction to agonist side-chains with the remainder of the mol. being little changed. This may be the reason for their antagonist properties.

IT 243470-73-7 243470-74-8 243470-75-9  
 243470-76-0 243470-77-1 243470-78-2  
 243470-79-3 243470-80-6 243470-81-7  
 243470-82-8 243470-83-9 243470-84-0



243470-85-1 243470-86-2 243470-87-3

243470-88-4 243470-89-5 243470-90-8

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(**somatostatin** receptor antagonists based on a mixed neuromedin B antagonist/**somatostatin** agonist)

IT 51110-01-1D, **Somatostatin**, analogs

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(**somatostatin** receptor antagonists based on a mixed neuromedin B antagonist/**somatostatin** agonist)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L87 ANSWER 5 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:282740 HCAPLUS

DOCUMENT NUMBER: 131:124917

TITLE: Highly Potent Cyclic Disulfide Antagonists of **Somatostatin**

AUTHOR(S): Hocart, Simon J.; Jain, Rahul; Murphy, William A.; Taylor, John E.; Coy, David H.

CORPORATE SOURCE: Peptide Research Laboratories, Tulane University School of Medicine, New Orleans, LA, 70112, USA

SOURCE: Journal of Medicinal Chemistry (1999), 42(11), 1863-1871

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The search for synthetic analogs of **somatostatin** (SRIF) which exhibit selective affinities for the five known receptor subtypes (sst1-5) has generated a large no. of potent agonist analogs. Many of these agonists display good subtype selectivities and affinities for the subtypes 2, 3, and 5, with very few selective for sst1 or sst4. Until the recent report by Bass and co-workers (Mol. Pharmacol. 1996, 50, 709-715; erratum Mol. Pharmacol. 1997, 51, 170), no true antagonists of **somatostatin** had been discovered, let alone any displaying differential receptor subtype selectivity. In this present study, the authors further explore the effect of this putative L5D6 antagonist motif on **somatostatin** octapeptide analogs with a cyclic hexapeptide core. The most potent antagonist found to date is H-Cpa-cyclo[DCys-Tyr-DTrp-Lys-Thr-Cys]-Nal-NH<sub>2</sub>, PRL-2970, which has an IC<sub>50</sub> of 1.1 nM in a rat pituitary growth hormone in vitro antagonist assay vs. SRIF (1 nM). This analog bound to cloned human **somatostatin** subtype 2 receptors with a K<sub>i</sub> of 26 nM. The highest hsst2 affinity analog was H-Cpa-cyclo[DCys-Pal-DTrp-Lys-Tle-Cys]-Nal-NH<sub>2</sub>, PRL-2915, with a K<sub>i</sub> of 12 nM (IC<sub>50</sub> = 1.8 nM). This analog was also selective for hsst2 over hsst3 and hsst5 by factors of 8 and 40, resp., and had no agonist activity when tested alone at concns. up to 10 .mu.M. Regression anal. of the binding affinities vs. the obsd. antagonist potencies revealed high correlations for hsst2 (r = 0.65) and hsst3 (r = 0.52) with a less significant correlation to hsst5 (r = 0.40). This is quite different from the **somatostatin** agonist analogs which show a highly significant correlation to hsst2 (r > 0.9). Receptor-selective **somatostatin** antagonists should provide valuable tools for characterizing the many important physiol. functions of this neuropeptide.

IT 9002-72-6, Growth hormone

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(interaction with; structure-activity relationships of cyclic disulfide antagonists of **somatostatin**)

IT 205234-66-8P, DC 38-48 209005-80-1P 209005-81-2P  
 209005-82-3P 209005-83-4P 209005-84-5P  
 209005-85-6P 209005-86-7P 209005-87-8P  
 209005-88-9P 209005-89-0P 209005-90-3P  
 209005-91-4P 209005-93-6P 209005-95-8P  
 209005-97-0P 209005-99-2P 209006-01-9P  
 209006-02-0P 209006-03-1P 209006-04-2P  
 209006-05-3P 209006-07-5P 209006-08-6P  
 209006-09-7P 209006-10-0P 209006-11-1P  
 209006-12-2P 209006-13-3P 209006-14-4P  
 209006-15-5P 209006-17-7P 209006-18-8P  
 209006-19-9P 230646-25-0P 230646-26-1P  
 230646-27-2P 230646-28-3P 230646-29-4P  
 230646-30-7P 230646-31-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PNU (Preparation, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)

(structure-activity relationships of cyclic disulfide antagonists of somatostatin)

IT 51110-01-1, Somatostatin

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (structure-activity relationships of cyclic disulfide antagonists of somatostatin)

REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L87 ANSWER 6 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:788734 HCAPLUS

DOCUMENT NUMBER: 130:47494

TITLE: Pure **somatostatin** antagonist and methods of use thereof

INVENTOR(S): Bass, Roy Tyson; Buckwalter, Brian Lee; Hadcock, John Richard; Patel, Bomi Pilloo; Chiarello, John Francis

PATENT ASSIGNEE(S): American Cyanamid Company, USA

SOURCE: U.S., 8 pp.

DOCUMENT TYPE: CODEN: USXXAM

LANGUAGE: Patent

FAMILY ACC. NUM. COUNT: 1 English

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5846934	A	19981208	US 1997-801374	19970219 <--
PRIORITY APPLN. INFO.:			US 1997-801374	19970219
OTHER SOURCE(S):		MARPAT 130:47494		

AB **Somatostatin** antagonist peptides that are selective for subtypes SSTR2 and SSTR5 are described. The present invention also relates to these peptides with increasing the release of growth hormone, insulin, and glucagon in mammals, and a method for the enhancement of growth.

IT 195520-39-9P 195520-40-2P 195520-42-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(peptidic **somatostatin** antagonists and effects on growth hormone, insulin and glucagon release)

IT 195520-46-8 195520-47-9

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(peptidic **somatostatin** antagonists and effects on growth hormone, insulin and glucagon release)

IT 9002-72-6, Growth hormone 51110-01-1,  
**Somatostatin**

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL  
(Biological study); PROC (Process)  
(peptidic **somatostatin** antagonists and effects on growth  
hormone, insulin and glucagon release)

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L87 ANSWER 7 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:750460 HCAPLUS

DOCUMENT NUMBER: 130:76579

TITLE: Examination of **somatostatin** involvement in  
the inhibitory action of GIP, GLP-1, amylin and  
adrenomedullin on gastric acid release using a new  
SRIF antagonist analog

AUTHOR(S): Rossowski, Wojciech J.; Cheng, Beng-L.; Jiang,  
Ning-Y.; Coy, David H.

CORPORATE SOURCE: Peptide Research Laboratories, Department of Medicine,  
Tulane University School of Medicine, New Orleans, LA,  
70112-2699, USA

SOURCE: British Journal of Pharmacology (1998),  
125(5), 1081-1087

PUBLISHER: CODEN: BJPCBM; ISSN: 0007-1188

DOCUMENT TYPE: Stockton Press

LANGUAGE: Journal

English

AB The effect of a new type 2 selective **somatostatin** (SRIF)  
receptor antagonist (DC-41-33) on **somatostatin**-induced  
inhibition of pentagastrin-stimulated gastric acid secretion in conscious,  
chronic gastric fistula equipped rats was studied. Infused i.v., DC-41-33  
dose-dependently inhibits SRIF-induced inhibition of pentagastrin-  
stimulated gastric acid secretion with an IC50 of 31.6+-.1.2 nmol kg-1  
vs. 10 nmol kg-1 SRIF and blocks the inhibitory effects of SRIF when  
simultaneously co-infused. Its effectiveness provides addnl. evidence  
that SRIF-inhibition of gastric acid release is a SRIF type 2  
receptor-mediated process. DC-41-33 is able to completely reverse the  
inhibitory effect of glucose-dependent insulinotropic polypeptides, GIP  
and GIP-(1-30)NH2, and glucagon-like polypeptide, GLP-1(7-36)NH2, on  
pentagastrin-stimulated gastric acid secretion thus confirming that they  
exert these effects through stimulation of endogenous SRIF release.  
DC-41-33 only partially blocks potent amylin and adrenomedullin-induced  
inhibition of gastric acid secretion, therefore suggesting that  
**somatostatin** may not function as a primary mediator in the action  
of these peptides. The results indicate that DC-41-33, is a potent in  
vivo inhibitor of exogenous and endogenous SRIF in rats. It represents a  
new class of SRIF analogs which should eventually provide excellent tools  
for further evaluating the many physiol. roles of SRIF and its five  
receptor subtypes.

IT 51110-01-1, **Somatostatin**

RL: BAC (Biological activity or effector, except adverse); BPR (Biological  
process); BSU (Biological study, unclassified); BIOL (Biological study);  
PROC (Process)

(examn. of **somatostatin** involvement in inhibitory action of  
GIP, GLP-1, amylin and adrenomedullin on gastric acid release using a  
new SRIF antagonist analog DC-41-33)

IT 209006-12-2

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)

(examn. of **somatostatin** involvement in inhibitory action of  
GIP, GLP-1, amylin and adrenomedullin on gastric acid release using a  
new SRIF antagonist analog DC-41-33)

REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS

## RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L87 ANSWER 8 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1998:394351 HCAPLUS  
 DOCUMENT NUMBER: 129:68033  
 TITLE: Preparation of **somatostatin** antagonists  
 containing D-amino acids in the second position  
 INVENTOR(S): Morgan, Barry; Murphy, William; Coy, David H.  
 PATENT ASSIGNEE(S): Biomeasure Incorporated, USA; Administration of the  
 Tulane Educational Fund; Morgan, Barry; Murphy,  
 William; Coy, David H.  
 SOURCE: PCT Int. Appl., 54 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9824807	A2	19980611	WO 1997-US22251	19971204 <--
WO 9824807	A3	19981015		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 6262229	B1	20010717	US 1997-855204	19970513
ZA 9710855	A	19980612	ZA 1997-10855	19971203 <--
AU 9876248	A1	19980629	AU 1998-76248	19971204 <--
AU 728224	B2	20010104		
EP 956296	A2	19991117	EP 1997-949758	19971204 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 9714376	A	20000321	BR 1997-14376	19971204 <--
NZ 335879	A	20001124	NZ 1997-335879	19971204 <--
JP 2001505580	T2	20010424	JP 1998-525801	19971204
RU 2179172	C2	20020210	RU 1999-114018	19971204
PRIORITY APPLN. INFO.:			US 1996-32358P	P 19961204
			US 1996-760672	A 19961204
			US 1997-855204	A2 19970513
			WO 1997-US22251	W 19971204
OTHER SOURCE(S):		MARPAT 129:68033		
GI				

R<sup>1</sup>  
 A<sup>1</sup>-A<sup>2</sup>-A<sup>3</sup>-AA<sup>4</sup>-Lys-A<sup>6</sup>-A<sup>7</sup>-A<sup>8</sup>-R<sup>3</sup>  
 R<sup>2</sup>

I

AB The invention features **somatostatin** antagonists I [A<sup>1</sup> = D- or L-amino acid residue, or is deleted; A<sup>2</sup> = D-Cys, D-penicillamine (D-Pen), arom. D-amino acid, aliph. D-amino acid; A<sup>3</sup> = arom. amino acid; A<sup>4</sup> = Trp, D-Trp; A<sup>6</sup> = Thr, Thr(CH<sub>2</sub>Ph), Gly, Ser, aliph. amino acid; A<sup>7</sup> = Cys, Pen, arom. amino acid, aliph. amino acid; A<sup>8</sup> = D- or L- Thr, D- or L-Ser, arom. D- or L-amino acid, aliph. D- or L-amino acid; R<sup>1</sup>, R<sup>2</sup> = independently H, (un)substituted lower alkyl, aryl, aryl lower alkyl, heterocyclyl,

heterocyclyl lower alkyl, EISO<sub>2</sub>, EICO; E1 = aryl, aryl lower alkyl, heterocyclyl, heterocyclyl lower alkyl; R3 = OH, NH<sub>2</sub>, C1-12 alkoxy, NHYCH<sub>2</sub>Z; Y = C1-12 hydrocarbon moiety; Z = H, OH, CO<sub>2</sub>H, CONH<sub>2</sub>; or R3 and the carbonyl group of A8 are reduced to form H, lower alkyl, hydroxy lower alkyl; with provisos] having a D-amino acid at the second residue. Thus, H-.beta.-Nal-D-Cys-Pal-D-Trp-Lys-Val-Cys-.beta.-Nal-NH<sub>2</sub> cyclic disulfide [II; .beta.-Nal = 3-(2-naphthyl)alanine; Pal = 3-(3-pyridyl)alanine] was prepd. by std. solid-phase methods on a benzhydrylamine-polystyrene resin using tert-butoxycarbonyl (Boc) N.alpha.-protection. II inhibited the in vitro release of growth hormone in a rat pituitary assay with IC<sub>50</sub> = 0.01 .mu.M.

IT **51110-01-1, Somatostatin**

RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)

(antagonists; prepn. of D-amino acid-contg. **somatostatin** antagonists)

IT 152045-42-6P 171894-24-9P 195520-46-8P  
 205234-58-8P 205234-59-9P 205234-60-2P  
 205234-61-3P 205234-63-5P 205234-65-7P  
 205234-66-8P 205234-67-9P 205234-68-0P  
 205234-69-1P 205234-70-4P 205234-71-5P  
 205234-72-6P 205234-73-7P 205234-74-8P  
 209005-80-1P 209005-81-2P 209005-82-3P  
 209005-83-4P 209005-84-5P 209005-85-6P  
 209005-86-7P 209005-87-8P 209005-88-9P  
 209005-89-0P 209005-90-3P 209005-91-4P  
 209005-93-6P 209005-95-8P 209005-97-0P  
 209005-99-2P 209006-01-9P 209006-02-0P  
 209006-03-1P 209006-04-2P 209006-05-3P  
 209006-07-5P 209006-08-6P 209006-09-7P  
 209006-10-0P 209006-11-1P 209006-12-2P  
 209006-13-3P 209006-14-4P 209006-15-5P  
 209006-17-7P 209006-18-8P 209006-19-9P  
 209006-20-2P 209006-21-3P 209006-22-4P  
 209006-23-5P 209006-24-6P 209006-32-6P  
 209006-33-7P 209006-34-8P 209006-35-9P  
 209006-36-0P 209006-37-1P 209006-38-2P  
 209006-43-9P 209006-44-0P 209006-45-1P  
 209006-46-2P 209006-47-3P 209006-48-4P  
 209006-49-5P 209006-50-8P 209006-59-7P  
 209006-60-0P 209006-62-2P 209006-64-4P  
 209006-65-5P 209006-66-6P 209006-67-7P  
 209006-68-8P 209006-76-8P 209006-77-9P  
 209006-78-0P 209006-79-1P 209006-83-7P  
 209006-84-8P 209006-85-9P 209006-86-0P  
 209006-87-1P 209006-88-2P 209006-89-3P  
 209006-90-6P 209006-91-7P 209006-92-8P  
 209006-94-0P 209006-95-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of D-amino acid-contg. **somatostatin** antagonists)

L87 ANSWER 9 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:352409 HCAPLUS

DOCUMENT NUMBER: 129:23568

TITLE: Long-term inhibitory effects of **somatostatin** and insulin-like growth factor 1 on growth hormone release by serum-free primary culture of pituitary cells from European eel (*Anguilla anguilla*)

AUTHOR(S): Rousseau, Karine; Huang, Yung-Sen; Le Belle, Nadine; Vidal, Bernadette; Marchelidon, Jacques; Epelbaum, Jacques; Dufour, Sylvie

CORPORATE SOURCE: Laboratoire Physiologie Generale Comparee, Museum  
National Histoire Naturelle, Paris, F-75231, Fr.

SOURCE: Neuroendocrinology (1998), 67(5), 301-309  
CODEN: NUNDAJ; ISSN: 0028-3835

PUBLISHER: S. Karger AG

DOCUMENT TYPE: Journal

LANGUAGE: English

AB To investigate the ability of hypothalamic and peripheral factors to directly regulate growth hormone (GH) release in a primitive teleost, the European eel (*A. anguilla*), primary cultures of dispersed pituitary cells were used. When cultured for 12 days in a serum-free medium, pituitary cells continuously released large amts. of GH, which exceeded the initial cellular content. **Somatotropin**-release inhibiting hormone (SRIH-14) dose-dependently inhibited GH release (EC50 0.75 nM) .ltoreq.95%. No desensitization of **somatotropes** to SRIH was obsd. over the 12 days of culture. Use of receptor subtype-selective SRIH agonists suggests the existence on eel **somatotropes** of SRIH receptor(s) related to the mammalian sst2/sst3/ sst5 class rather than to the sst1/sst4 class. Insulin-like growth factor 1 (IGF1) dose-dependently inhibited GH release (EC50 0.03 nM) .ltoreq.85%, without desensitization. IGF1 and IGF2 were equipotent in inhibiting GH release, whereas insulin was 1000 .times. less active, suggesting the implication of a receptor related to the mammalian IGF type 1 receptor. These results indicate that eel **somatotropes** are active in vitro without any specific addnl. factors, and suggest the existence of a dominant inhibitory control of GH release in vivo. Two potential candidates for this chronic neg. regulation are a neurohormone, SRIH and a circulating factor, IGF1. These data underline the early evolutionary origin of the mol. and functional SRIH-GH-IGF1 neuroendocrine axis in vertebrates.

IT 51110-01-1, **Somatostatin** 67763-96-6,  
Insulin-like growth factor 1  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(in vitro regulation of eel GH release by **somatostatin** and IGF-I)

IT 9002-72-6, Growth hormone  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(in vitro regulation of eel GH release by **somatostatin** and IGF-I)

IT 75037-27-3, **Somatostatin** 28 111857-96-6, BIM  
23042  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(inhibitory effects of **somatostatin** agonists on GH release by eel pituitary cells)

L87 ANSWER 10 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:169728 HCAPLUS

DOCUMENT NUMBER: 128:252501

TITLE: Potent Antagonists of **Somatostatin**:  
Synthesis and Biology

AUTHOR(S): Hocart, Simon J.; Jain, Rahul; Murphy, William A.;  
Taylor, John E.; Morgan, Barry; Coy, David H.

CORPORATE SOURCE: Peptide Research Laboratories, Tulane University  
School of Medicine, New Orleans, LA, 70112, USA

SOURCE: Journal of Medicinal Chemistry (1998),  
41(7), 1146-1154  
CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The search for synthetic analogs of **somatostatin** (SRIF) which

exhibit selective affinities for the five known receptor subtypes (sst1-5) has generated a large no. of potent agonist analogs. Many of these agonists display good subtype selectivities and affinities for the subtypes 2, 3, and 5, with very few selective for sst1 or sst4. Until the recent report by Bass and co-workers (Mol. Pharmacol. 1996, 50, 709-715; erratum, Mol. Pharmacol. 1997, 51, 170), no true antagonists had been discovered, let alone any displaying differential receptor subtype selectivity. In this present study, we explore the effect of this putative L5,D6 antagonist motif on various series of **somatostatin** agonist analogs, both linear and cyclic. It was found that many D5,L6 agonists could be converted into competitive antagonists by applying this motif, the most potent of which was H-Nal-cyclo[DCys-Pal-DTrp-Lys-Val-Cys]-Nal-NH<sub>2</sub> (32). This antagonist was selective for hsst2 with an affinity of 75 nM and an IC<sub>50</sub> of 15.1 nM against SRIF-14 in a rat in vitro antagonist bioassay. Receptor-selective **somatostatin** antagonists should provide valuable tools for characterizing the many important physiological functions of this neuropeptide.

IT 66610-31-9P, NC-11-31 152045-42-6P, DC-32-57  
 152045-43-7P, DC-32-53 171894-24-9P, NC-8-61  
 205234-58-8P, DC-38-39 205234-59-9P, DC-38-35  
 205234-60-2P, DC-38-67 205234-61-3P, DC-38-64  
 205234-63-5P, JF-04-47 205234-65-7P, RJ-01-20  
 205234-66-8P, DC-38-48 205234-67-9P, DC-38-51  
 205234-68-0P, RJ-01-28 205234-69-1P, RJ-01-44  
 205234-70-4P, RJ-01-76 205234-71-5P, RJ-01-31  
 205234-72-6P, RJ-01-36 205234-73-7P, RJ-01-40  
 205234-74-8P, RJ-01-80

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and structure-activity relations of peptide **somatostatin** antagonists)

IT 9002-72-6, Growth hormone

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(release inhibition; prepn. and structure-activity relations of peptide **somatostatin** antagonists)

L87 ANSWER 11 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:807093 HCAPLUS

DOCUMENT NUMBER: 128:110989

TITLE: Species differences between male rat and ram pituitary **somatostatin** receptors involved in the inhibition of growth hormone secretion

AUTHOR(S): Briard, N.; Dutour, A.; Epelbaum, J.; Sauze, N.; Slama, A.; Oliver, C.

CORPORATE SOURCE: Laboratoire de Neuroendocrinologie Experimentale, INSERM U297, Institut Federatif Jean Roche, Marseille, 13916, Fr.

SOURCE: European Journal of Endocrinology (1997), 137(5), 545-555

PUBLISHER: CODEN: EJOEEP; ISSN: 0804-4643

DOCUMENT TYPE: BioScientifica

LANGUAGE: English

AB The sheep is a valuable model in which to study GH neuroregulation as its pattern of GH secretion is very close to that in humans. Furthermore, important differences in **somatostatin** (SRIH) action between rats and sheep have been found previously. The goal of this study was to compare in male rat and ram pituitaries the binding characteristics of **somatostatin** receptors and the effect of SRIH and 17 analogs on GH release. Using radioautog., SRIH binding was seen to be evenly distributed over the anterior pituitary of both species. In the binding

assay, binding sites were three times more concd. in rats than in sheep. Important interspecies differences in the action of SRIH and its analogs were found: they inhibited GH at lower concns. in rats than in sheep. Seven peptides displayed greater inhibitory ability in sheep than in rats while three were more potent in rats. Agonistic potencies to inhibit GH release in rats were correlated with **somatostatin** receptors subtype 2 (sst2) affinities. The data confirm and extend the quant. differences between rat and sheep in SRIH inhibitory action on GH secretion and confirm that ligand-binding properties of a given receptor subtype cannot be extrapolated across species.

IT 51110-01-1, **Somatostatin**-14 75037-27-3,  
**Somatostatin**-28 77909-99-0 99341-94-3  
 111857-95-5, BIM 23034 111857-96-6, BIM 23042  
 135048-17-8 150155-55-8, BIM 23060  
 RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(species differences between male rat and ram pituitary **somatostatin** receptors involved in inhibition of growth hormone secretion)

IT 9002-72-6, Growth hormone  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(species differences between male rat and ram pituitary **somatostatin** receptors involved in inhibition of growth hormone secretion)

REFERENCE COUNT: 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L87 ANSWER 12 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:589211 HCAPLUS

DOCUMENT NUMBER: 127:248422

TITLE: Preparation of peptide derivatives as **somatostatin** antagonists and measurement of their biological activities

INVENTOR(S): Bass, Roy Tyson; Buckwalter, Brian Lee; Hadcock, John Richard; Patel, Bomi Pilloo; Chiarello, John Francis

PATENT ASSIGNEE(S): American Cyanamid Company, USA

SOURCE: Eur. Pat. Appl., 19 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 791603	A2	19970827	EP 1997-301092	19970220 <--
EP 791603	A3	19980812		
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
JP 09328499	A2	19971222	JP 1997-46968	19970217 <--
CA 2197833	AA	19970821	CA 1997-2197833	19970218 <--
AU 9714800	A1	19970828	AU 1997-14800	19970220 <--
AU 721710	B2	20000713		
ZA 9701483	A	19980820	ZA 1997-1483	19970220 <--

PRIORITY APPLN. INFO.: US 1996-604044 A 19960220 (02/9)

OTHER SOURCE(S): MARPAT 127:248422

AB Titled peptides R1R2AA1-cyclo(D-Cys-AA2-D-Trp-AA3-AA4-Cys)-AA5-NH2 [R1 = R2 = H, C1-8 alkyl, COR, CO2R where R = C1-8 alkyl, (substituted) Ph, (substituted) naphthyl; AA1 = AA2 = D- or L-arom. .alpha.-amino acid; AA3 = D- or L-Arg, Lys, Orn, Cit (Citrulline); AA4 = Val, Leu, Ile, Abu (.alpha.-aminobutyric acid), Nle, Thr, 3-(alkyl)Ser, Thr(Bzl), Ser(Bzl) with the proviso that when AA4 = Thr then AA1 = L-isomer; AA5 = D- or L-



arom. .alpha.-amino acid, N-MeAla, N.alpha.-(alkyl)amino acid, Thr, Ser] were prepd. as **somatostatin** antagonists. H-p-NO<sub>2</sub>Phe-D-Cys-Tyr-D-Trp-Lys-Val-Cys-N.alpha.MeAla-NH<sub>2</sub> was prepd. on a Millipore 9050 peptide synthesizer using PAL resin and std. Fmoc chem. The **somatostatin** antagonist activity of the above peptide in cyclized form was measured to be 3 (in a scale of 1-5 where 5 is the max. antagonist activity) in an yeast assay.

## IT 195520-40-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. and cyclization of)

## IT 195520-42-4P 195520-46-8P 195520-47-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. of peptide derivs. as **somatostatin** antagonists and measurement of their biol. activities)

## IT 51110-01-1, Somatostatin

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(prepn. of peptide derivs. as **somatostatin** antagonists and measurement of their biol. activities)

## IT 195520-39-9DP, resin-bound

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of peptide derivs. as **somatostatin** antagonists and measurement of their biol. activities)

L87 ANSWER 13 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:567970 HCAPLUS

DOCUMENT NUMBER: 127:229846

TITLE: Activation of human **somatostatin** receptor type 2 causes inhibition of cell growth in transfected HEK293 but not in transfected CHO cells

AUTHOR(S): Ren, J.; Bell, G.; Coy, D. H.; Brunicardi, F. C.

CORPORATE SOURCE: Department of Surgery, Baylor College of Medicine, Houston, TX, 77030, USA

SOURCE: Journal of Surgical Research (1997), 71(1), 13-18

CODEN: JSGRA2; ISSN: 0022-4804

PUBLISHER: Academic

DOCUMENT TYPE: Journal

LANGUAGE: English

AB **Somatostatin** (SS) is known to have an antiproliferative effect on cell growth via **somatostatin** receptors (SSTR). The purpose of this study was to transfect cell lines with human SSTR2 and det. the subsequent effect on cell growth in response to SSTR agonist. Heterologous Chinese hamster ovary (CHO-K1) and human embryonic kidney 293 (HEK) cells were transfected with SSTR2 cDNA using lipofectin. Stable transformants were selected by G418 and confirmed by 125I-SS binding and RT-PCR. Binding studies were performed in the presence of 10<sup>-6</sup> to 10<sup>-12</sup> M SS-14, SS-28, SS analog RC-160, SSTR2 agonist NC-9-74, and SSTR5 agonist DC-37-39. Cell growth was detd. by counting cell nos. after 48 h incubation in the presence of 10<sup>-6</sup> to 10<sup>-12</sup> M SSTR2 agonist NC-9-74. Binding of 125I-SS-14 to transfected CHO and transfected HEK293 cells showed that the cells had high affinity for SS-14, SS-28, NC-9-74, and RC-160 but low affinity for DC-37-39. Incubation with 10<sup>-6</sup> to 10<sup>-12</sup> M NC-9-74, showed that 1 nM to 1 .mu.M NC-9-74 significantly inhibited transfected HEK293 cell growth but did not affect growth on transfected CHO cells (n = 4 for each dose, P < 0.01). The two cell lines transfected with the human SSTR2 showed similar high affinity for SS-14, SS-28, RC-160, and SSTR2 agonist but not SSTR5 agonist. The SSTR2 agonist NC-9-74 significantly inhibited transfected HEK293 cell growth but not CHO

cells. These data suggest that activation of SSTR2 was more efficiently coupled to the signal transduction pathway of antiproliferation in the transfected HEK293 cells.

IT 51110-01-1, **Somatostatin-14 75037-27-3,**

**Somatostatin-28 163687-44-3**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(activation of human **somatostatin** receptor type 2 causes inhibition of cell growth in transfected HEK293 but not in transfected CHO cells)

L87 ANSWER 14 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:436397 HCAPLUS

DOCUMENT NUMBER: 127:131228

TITLE: **Somatostatin** inhibits gastrin release and acid secretion by activating sst2 in dogs

AUTHOR(S): Lloyd, K. C. K.; Amirmoazzami, S.; Friedik, F.; Chew, P.; Walsh, J. H.

CORPORATE SOURCE: Research and Medical Services, and CURE: Digestive Diseases Res. Center, West Los Angeles Veterans Affairs Med. Cent., Los Angeles, CA, 90073, USA

SOURCE: American Journal of Physiology (1997),

272(6, Pt. 1), G1481-G1488

CODEN: AJPHAP; ISSN: 0002-9513

PUBLISHER: American Physiological Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB **Somatostatin** is a potent inhibitor of gastrin-stimulated acid secretion by activation of **somatostatin** receptor type 2 (sst2) in vivo, probably in part by blocking gastrin-stimulated histamine release from enterochromaffin-like cells expressing sst2. The authors propose that activation of sst2 may also regulate meal-stimulated acid secretion by blocking gastrin release from antral G cells. Using peptide analogs relatively selective for sst2 (NC-8-12), sst3 (BIM-23058), and sst5 (BIM-23052), the authors tested this hypothesis in two ways: first, in vivo by measuring plasma gastrin release during meal-stimulated acid secretion in dogs, and second, in vitro by measuring bombesin-stimulated gastrin release from an enriched culture of canine antral G cells. In vivo, a low dose (0.05 nmol/kg/h) of NC-8-12 inhibited acid secretion 56% without blocking gastrin release. A higher dose (1 nmol/kg/h) of NC-8-12 abolished acid secretion and inhibited gastrin release by 61%, whereas the highest dose (5 nmol/kg/h) inhibited gastrin release by 84%. Only the highest doses (5 nmol/kg/h) of BIM-23058 and BIM-23052 significantly inhibited gastrin release and acid secretion. In vitro, NC-8-12 (10<sup>-9</sup> M) reduced bombesin-stimulated gastrin release from antral G cells by 49%, whereas BIM-23058 and BIM-23052 were at least 100-fold less effective. These results indicate that **somatostatin** activation of sst2, but not sst3 or sst5, is the major pathway for **somatostatin**-induced inhibition of meal-stimulated gastrin release and acid secretion.

IT 51110-01-1, **Somatostatin-14 163687-44-3,**

NC-8-12

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(**somatostatin** inhibits gastrin release and acid secretion by activating sst2 receptors)

L87 ANSWER 15 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:327036 HCAPLUS

DOCUMENT NUMBER: 127:45199

TITLE: Colonic smooth muscle cells possess a different subtype of **somatostatin** receptor from gastric smooth muscle cells

AUTHOR(S): Corleto, V. D.; Severi, C.; Coy, D. H.; Fave, G.

CORPORATE SOURCE: Delle; Jensen, R. T.  
 Digestive Diseases Branch, National Institute Diabetes  
 and Digestive and Kidney Diseases, National Institutes  
 Health, Bethesda, MD, 20892, USA

SOURCE: American Journal of Physiology (1997),  
 272(4, Pt. 1), G689-G697  
 CODEN: AJPHAP; ISSN: 0002-9513

PUBLISHER: American Physiological Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB **Somatostatin** (SS) alters colonic motility. To investigate whether SS has a direct effect on colonic smooth muscle cells, the authors prepd. isolated muscle cells from the descending guinea pig colon and compared the effects of SS with those on isolated gastric smooth muscle cells. In gastric cells, SS had no effect on carbachol-induced contraction, whereas in colonic cells it caused inhibition. In colonic muscle cells, SS-28 caused >85% inhibition of contraction by cholecystokinin octapeptide (CCK-8), bombesin, 12-O-tetradecanoylphorbol 13-acetate, and ionomycin, whereas it had no effect on contraction by these agents in gastric cells. In gastric cells, SS inhibited relaxation. Three synthetic SS analogs had different relative affinities for causing effects in gastric and colonic cells. Pertussis toxin inhibited the action of SS-28 in each muscle cell type by 50-75%. SS-28 alone had a small contractile effect on cells from the circular layer of the colon. SS-28 inhibited carbachol-induced contraction in colonic cells from both the longitudinal and circular layers. These results demonstrate that the action of SS differs in colonic and gastric smooth muscle cells. SS inhibits contractants in colonic cells and relaxants in gastric cells. In colonic cells, SS has a weak contractile effect due to an effect on circular muscle cells and an inhibitory effect on cells from both longitudinal and circular layers. A different SS receptor subtype mediates the actions of SS in colonic and gastric muscle cells. In both cell types, the actions of SS are mediated by pertussis toxin-sensitive and -insensitive G proteins.

IT 51110-01-1, **Somatostatin**-14 75037-27-3,  
**Somatostatin**-28 163687-44-3

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
 (colonic smooth muscle cells possess a different subtype of  
**somatostatin** receptor from gastric smooth muscle cells)

L87 ANSWER 16 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:695906 HCAPLUS

DOCUMENT NUMBER: 126:26918

TITLE: **Somatostatin**-based neuromedin B receptor  
 antagonists: Dissociation of neuromedin B and  
**somatostatin** receptor binding

AUTHOR(S): Coy, D. H.; Jiang, N. -Y.; Taylor, J. E.

CORPORATE SOURCE: Medical Center, Tulane University, New Orleans, LA,  
 70112, USA

SOURCE: Peptides: Chemistry, Structure and Biology,  
 Proceedings of the American Peptide Symposium, 14th,  
 Columbus, Ohio, June 18-23, 1995 (1996),  
 Meeting Date 1995, 344-345. Editor(s): Kaumaya,  
 Pravin T. P.; Hodges, Robert S. Mayflower Scientific:  
 Kingswinford, UK.  
 CODEN: 63NTAF

DOCUMENT TYPE: Conference

LANGUAGE: English

AB Cyclic **somatostatin** octapeptide analogs with replacement of Lys  
 in position 5 by Orn exhibited good retention of neuromedin B receptor  
 affinity but >50-fold loss of SRIF receptor affinity on transfected cells  
 and SSTR2 receptors on pancreatic AR42J cells. Further side-chain

shortening by another CH<sub>2</sub> using .alpha.,.gamma.-diaminobutyric acid substitution was even more successful in dissocg. affinities since SRIF receptor affinity decreased by >1000-fold. Necessity for a basic group in the side-chain was apparent from the loss of affinity with an ALA substitutes analog but retention of binding with an Arg substitution. All active peptides were able to block NMB-stimulated inositol phosphate prodn. with IC<sub>50</sub> values in good agreement with binding data and all had little affinity for the bombesin/GRP receptor.

IT 38916-34-6, **Somatostatin 51110-01-1D**,

**Somatostatin-14**, cyclic analogs 120796-15-8

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)

(**somatostatin**-based neuromedin B receptor antagonists with dissocn. of neuromedin B and **somatostatin** receptor binding)

L87 ANSWER 17 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:695866 HCAPLUS

DOCUMENT NUMBER: 126:14869

TITLE: Potent **somatostatin** analogs containing N-terminal modifications

AUTHOR(S): Kim, S. H.; Dong, J. Z.; Gordon, T. D.; Kimball, H. L.; Moreau, S. C.; Moreau, J.-P.; Morgan, B. A.; Murphy, W. A.; Taylor, J. E.

CORPORATE SOURCE: Biomeasure, Inc., Milford, MA, 01757, USA

SOURCE: Peptides: Chemistry, Structure and Biology, Proceedings of the American Peptide Symposium, 14th, Columbus, Ohio, June 18-23, 1995 (1996), Meeting Date 1995, 241-243. Editor(s): Kaumaya, Pravin T. P.; Hodges, Robert S. Mayflower Scientific: Kingswinford, UK.

CODEN: 63NTAF

DOCUMENT TYPE: Conference

LANGUAGE: English

AB The clin. utility of **somatostatin** analogs such as Octreotide and Lanreotide is now well established. Recent reports on the improved bioavailability of various peptides with certain N- or C-terminal modifications prompted us to investigate the discovery of a second generation of **somatostatin** analogs with greater potency in vivo. Our efforts were focused on N-terminal modification of cyclic octapeptides related to **somatostatin**. We now report the design, synthesis, and aspects of the in vitro and in vivo activities of these analogs.

IT 51110-01-1, **Somatostatin 150155-55-8**,

BIM-23060 182494-55-9, BIM 23167 182494-57-1, BIM

23179 182494-59-3, BIM 23201 184356-62-5, BIM 23180

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(potent **somatostatin** analogs contg. N-terminal modifications)

L87 ANSWER 18 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:563655 HCAPLUS

DOCUMENT NUMBER: 125:276578

TITLE: Ascorbic acid, tris, and piperazine peptide derivatives as antitumor, growth hormone release inhibiting, and thymidine uptake stimulating agents

INVENTOR(S): Kim, Sun H.; Keyes, Susan R.; Moreau, Sylviane; Dong, Zheng X.; Taylor, John

PATENT ASSIGNEE(S): Biomeasure, Inc., USA

SOURCE: U.S., 45 pp., Cont.-in-part of U. S. 104,194, abandoned.

CODEN: USXXAM

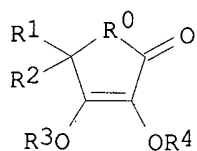
DOCUMENT TYPE: Patent

LANGUAGE: English

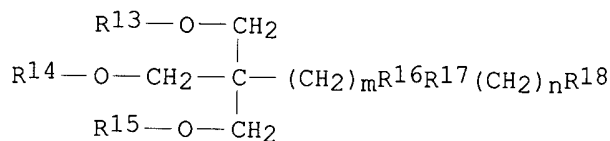
FAMILY ACC. NUM. COUNT: 2

## PATENT INFORMATION:

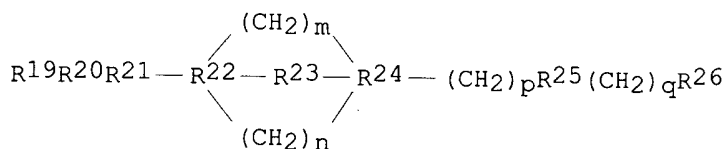
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5552520	A	19960903	US 1994-287957	19940809 <--
CA 2168113	AA	19950216	CA 1994-2168113	19940808 <--
CA 2168113	C	20021001		
HU 73491	A2	19960828	HU 1996-281	19940808 <--
CN 1133047	A	19961009	CN 1994-193717	19940808 <--
CN 1055700	B	20000823		
SG 75092	A1	20000919	SG 1996-5779	19940808 <--
EP 1288223	A1	20030305	EP 2002-26862	19940808
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT				
EP 1288224	A1	20030305	EP 2002-26863	19940808
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT				
ZA 9405966	A	19950626	ZA 1994-5966	19940809 <--
LT 4078	B	19960725	LT 1996-25	19960306 <--
LV 11549	B	19970420	LV 1996-71	19960308 <--
CZ 289590	B6	20020213	CZ 2000-1032	20000322
CZ 289552	B6	20020213	CZ 2000-1033	20000322
PRIORITY APPLN. INFO.:			US 1993-104194	B2 19930809
OTHER SOURCE(S):			EP 1994-924590	A3 19940808
GI			MARPAT 125:276578	



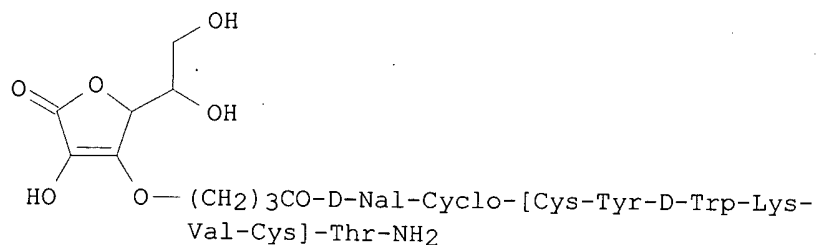
I



II



III



IV

AB A peptide deriv. is claimed, consisting of: a biol. active peptide having a free amino group, and at least one substituent attached to said peptide selected from the group consisting of I-III wherein: for I, R<sub>0</sub> is, e.g., O, S; each R<sub>1</sub> and R<sub>2</sub> is independently H, (CH<sub>2</sub>)<sub>m</sub>OR<sub>6</sub>, or CH(OR<sub>7</sub>)CH<sub>2</sub>OR<sub>8</sub>, wherein R<sub>6</sub> is H or (C<sub>2</sub>-C<sub>7</sub>) acyl, and each R<sub>7</sub> and R<sub>8</sub>, independently, is, e.g., H, (C<sub>2</sub>-C<sub>7</sub>) acyl; m is an integer between 1 and 5, inclusive; one of R<sub>3</sub> and R<sub>4</sub> is (CH<sub>2</sub>)<sub>n</sub>R<sub>12</sub> or (CH<sub>2</sub>)<sub>n</sub>CH(OH)R<sub>12</sub>, wherein R<sub>12</sub> is CO, CH<sub>2</sub> or SO<sub>2</sub>, and n is an integer between 1 and 5, inclusive; and the other of R<sub>3</sub> and R<sub>4</sub>

is H, (C1-C6) hydroxyalkyl, or (C2-C7) acyl; for II, each R13, R14, and R15, independently, is H or (C2-C24) acyl; R16 is NH or absent; R17 is CO, O, or absent; R18 is CO, CH2, SO2, or absent; m is an integer between 1 and 5, inclusive; n is an integer between 1 and 5, inclusive; for III, R19 is, e.g., H, NH2, an arom. functional group, OH; R20 is O or absent; R21 is (C1-C6) alkyl or absent; R22 is N, O, C, or CH; R23 is (C1-C6) alkyl or absent; R24 is N, CH, or C; R25 is NH, O, or absent; R26 is SO2, CO, or CH2; m is an integer between 0 and 5, inclusive; n is an integer between 0 and 5, inclusive; p is an integer between 0 and 5, inclusive; and q is an integer between 0 and 5, inclusive; wherein said peptide is attached to said substituent at R12, R18, or R26 via an amide, amino, or sulfonamide bond. Thus, e.g., amide coupling of D-Nal-Cyclo-[Cys-Tyr-D-Trp-Lys(BOC)-Val-Cys]-Thr-NH2 (prepn. given) with 3-O-(carboxypropyl)-5,6-isopropylideneascorbic acid (prepn. given) followed by deprotection afforded **somatostatin** deriv. IV (BIM-23118) which exhibited IC50 = 0.30 nM for binding to the **somatostatin** receptor and antiproliferative activity (cell growth = 61.0% of control after 8 days) at 100 nM using rat pancreas tumor cells vs. 91.3 and 98.0% of control, resp., for SRIF-14 and SRIF-28 (unmodified **somatostatin** analogs). Data are also presented for bombesin binding assay of a bombesin analog, inhibition of release of growth hormone by **somatostatin** analogs (in which all derivs. demonstrate a surprising prolonged duration of action which decreases in a time-dependent fashion), and thymidine uptake stimulation by bombesin analogs.

IT 182494-52-6P, BIM 23183 182494-55-9P, BIM 23167  
182494-57-1P, BIM 23179 182494-59-3P, BIM 23201  
182494-61-7P, BIM 23191

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(ascorbic acid, tris, and piperazine peptide derivs. as antitumor, growth hormone release inhibiting, and thymidine uptake stimulating agents)

IT 9002-72-6, Growth hormone

RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)  
(ascorbic acid, tris, and piperazine peptide derivs. as antitumor, growth hormone release inhibiting, and thymidine uptake stimulating agents)

IT 182482-16-2

RL: RCT (Reactant); RACT (Reactant or reagent)  
(ascorbic acid, tris, and piperazine peptide derivs. as antitumor, growth hormone release inhibiting, and thymidine uptake stimulating agents)

IT 182482-17-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(ascorbic acid, tris, and piperazine peptide derivs. as antitumor, growth hormone release inhibiting, and thymidine uptake stimulating agents)

L87 ANSWER 19 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:544511 HCAPLUS

DOCUMENT NUMBER: 125:257040

TITLE: Improved analogs and novel delivery systems for **somatostatin** octapeptides

AUTHOR(S): Moreau, J.-P.; Kim, S.; Dong, J. Z.; Ignatious, F.; Jackson, S.; Moreau, S. C.; Morgan, B. A.; Touraud, F.; Taylor, J. E.; et al.

CORPORATE SOURCE: Biomeasure Inc., Milford, MA, 01757-3650, USA

SOURCE: Metabolism, Clinical and Experimental (1996), 44(8, Suppl. 1), 24-26

PUBLISHER:                   CODEN: METAAJ; ISSN: 0026-0495  
 DOCUMENT TYPE:               Saunders  
 LANGUAGE:                   Journal  
                              English

AB   Appropriate N-terminus modification can result in **somatostatin** (SRIF) octapeptide analogs that are both more potent and more selective in vitro for the human SRIF receptor type 2 (hsst2). In addn., these modifications can improve the duration of action and bioavailability of SRIF analogs following parenteral administration, as shown by both pharmacol. and distribution studies in vivo with BIM-23190 and BIM-23197 in the rat.

IT   **38916-34-6, Somatostatin** (sheep) **51110-01-1D, Somatostatin**, analogs **150155-55-8, BIM-23060**  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
      (improved analogs and novel delivery systems for **somatostatin** octapeptides)

L87 ANSWER 20 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:           1996:528369 HCAPLUS  
 DOCUMENT NUMBER:           125:212818  
 TITLE:                    Identification of ligand binding determinants in the **somatostatin** receptor subtypes 1 and 2  
 AUTHOR(S):                Liapakis, George; Fitzpatrick, Daniel; Hoeger, Carl; Rivier, Jean; Vandlen, Richard; Reisine, Terry  
 CORPORATE SOURCE:         Dep. Pharmacol., Univ. Pennsylvania Sch. Med., Philadelphia, PA, 19104, USA  
 SOURCE:                   Journal of Biological Chemistry (1996), 271(34), 20331-20339  
                              CODEN: JBCHA3; ISSN: 0021-9258  
 PUBLISHER:                American Society for Biochemistry and Molecular Biology  
 DOCUMENT TYPE:           Journal  
 LANGUAGE:                 English

AB   The **somatostatin** (SRIF) receptors (SSTRs) 1 and 2 bind SRIF and SRIF 28 with high affinity, although a no. of synthetic hexapeptide and octapeptide analogs of SRIF bind selectively to SSTR2. Extracellular loop three and its adjoining trans-membrane-spanning regions contain elements essential for the binding of such analogs to murine SSTR2. In particular, a stretch of amino acids from residues 294-297 (FDFV) in murine SSTR2 in trans-membrane domain seven can det. affinity for the SSTR2-selective analogs. Within this region, Phe294 has previously been predicted to be essential for the binding of octapeptides (Kaupmann, K., et al, 1995). based on the observation that SSTR1 can bind the octapeptide SMS-201-995 with reasonable affinity after a Ser-to-Phe conversion in the analogous region of this receptor (SSTR1S305F). We find that SSTR1S305F has low affinity for a no. of SSTR2-selective hexapeptides, suggesting that these analogs have different binding requirements than SMS-201-995. A correlation is seen between the ability of SSTR1S305F to bind hexapeptide analogs and the presence of a phenylalanine, but not tyrosine, at position two in these small cyclic mols. Thus, a single hydroxyl group in hexapeptides can play a crit. role in detg. receptor binding to these receptor mutants. We also find that the second extracellular loop of SSTR1 is important for the selectivity of certain SRIF agonists for binding to SSTR1. Taken together, our data indicate that there are multiple elements in the **somatostatin** receptors that can det. the binding affinity and selectivity of peptide analogs.

IT   **51110-01-1, Somatostatin-14 73032-94-7, Somatostatin-28** (sheep) **150155-58-1, NC 4-28B 163687-44-3, NC 8-12**  
 RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)  
      (ligand binding determinants in **somatostatin** receptor subtypes 1 and 2)

L87 ANSWER 21 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1996:462531 HCAPLUS  
 DOCUMENT NUMBER: 125:105869  
 TITLE: Neuromedin B receptor antagonists  
 INVENTOR(S): Coy, David H.; Taylor, John E.  
 PATENT ASSIGNEE(S): Administrators of the Tulane Educational Fund, USA;  
 Biomeasure, Inc.  
 SOURCE: PCT Int. Appl., 22 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9617617	A1	19960613	WO 1995-US15808	19951207 <--
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5569741	A	19961029	US 1994-352392	19941208 <--
AU 9644740	A1	19960626	AU 1996-44740	19951207 <--
AU 715759	B2	20000210		
JP 10510268	T2	19981006	JP 1995-517725	19951207 <--
EP 1011716	A1	20000628	EP 1995-943375	19951207 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT				
PRIORITY APPLN. INFO.:			US 1994-352392	A2 19941208
			US 1992-919537	B2 19920727
			US 1993-78419	A2 19930617
			WO 1995-US15808	W 19951207
AB			Cyclic octapeptides, including D-Nal-Cys-Tyr-D-Trp-X-Val-Cys-Nal-NH <sub>2</sub> (where X = Dab, Orn, or Arg) and analogs thereof, acted as neuromedin B receptor antagonists in the inhibition of neuromedin B-induced appetite suppression in rats and inositol phosphate turnover in BALB-3T3 fibroblasts transfected with rat neuromedin B receptor.	
IT			<b>51110-01-1, Somatostatin-14</b> RL: BSU (Biological study, unclassified); BIOL (Biological study). (cyclic octapeptide neuromedin B receptor antagonist binding by gastrin-releasing peptide and <b>somatostatin</b> receptors)	
IT			<b>179188-76-2P</b> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (cyclic octapeptide neuromedin B receptor antagonist prepn. and biol. activity)	

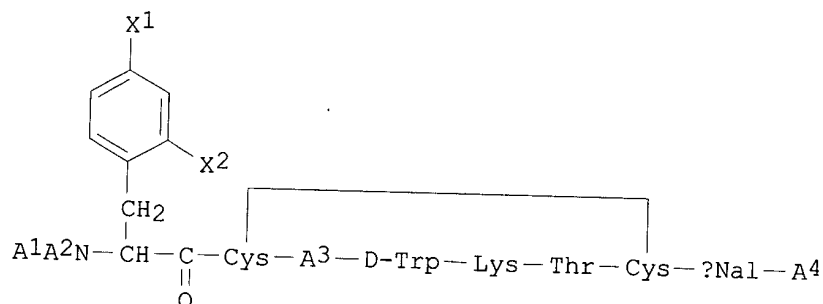
L87 ANSWER 22 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1996:275100 HCAPLUS  
 DOCUMENT NUMBER: 125:34167  
 TITLE: Octapeptide analogs of **somatostatin** having threonine at the sixth position as growth-hormone-release inhibitors  
 INVENTOR(S): Coy, David H.; Murphy, William A.  
 PATENT ASSIGNEE(S): The Administrators of the Tulane Educational Fund, USA  
 SOURCE: U.S., 4 pp., Cont.-in-part of U.S. Ser. No. 447,876, abandoned.  
 CODEN: USXXAM



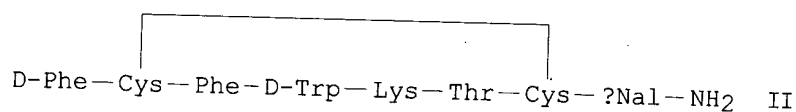
DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5506339	A	19960409	US 1992-840621	19920221 <--
CA 2046594	AA	19910609	CA 1990-2046594	19901204 <--
HU 59166	A2	19920428	HU 1991-2648	19901204 <--
AT 140237	E	19960715	AT 1991-901181	19901204 <--
ES 2091907	T3	19961116	ES 1991-901181	19901204 <--
JP 2925321	B2	19990728	JP 1990-501584	19901204 <--
ZA 9009896	A	19910925	ZA 1990-9896	19901210 <--
			US 1989-447876	19891208

PRIORITY APPLN. INFO.:  
 OTHER SOURCE(S): MARPAT 125:34167  
 GI



I



II

AB This invention provides title compds. I wherein each A1 and A2, independently, is H, C1-12 alkyl, C7-10 phenylalkyl, R1CO (where R1 is C1-20 alkyl, C3-20 alkenyl, C3-20 alkynyl, Ph, naphthyl, or C7-10 phenylalkyl), or R2OCO (where R2 is C1-10 alkyl or C7-10 phenylalkyl), provided that when one of A1 or A2 is R1CO or R2OCO, the other must be H; each X1 and X2, independently, is H, F, Cl, Br, OH, CH3, or CF3, provided that at least one of X1 and X2 must be H; A3 is Phe or Tyr; and A4 is OH, NH2, or NHR3 (wherein R3 is a satd. aliph. C1-8 alkyl); unless the D-stereoisomer of an amino acid (other than .beta.Nal) is specified, the L-form is assumed; .beta.-Nal denotes D- or L-.beta.-naphthylalanine; or a pharmaceutically acceptable salt thereof, possessing growth-hormone-release-inhibiting activity (no data). The solid-phase synthesis of octapeptide II is described.

IT 138248-86-9P 138248-87-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (octapeptide analogs of **somatostatin** having threonine at the sixth position as growth-hormone-release inhibitors)

IT 9002-72-6, Growth hormone 51110-01-1,  
**Somatostatin**

RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL

(Biological study)

(octapeptide analogs of **somatostatin** having threonine at the sixth position as growth-hormone-release inhibitors)

L87 ANSWER 23 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:89572 HCAPLUS

DOCUMENT NUMBER: 124:136089

TITLE: Intracerebroventricular injection of **somatostatin** sst5 receptor agonist inhibits gastric acid secretion in rats

AUTHOR(S): Martinez, Vicente; Coy, David H.; Lloyd, K. C. Kent; Tache, Yvette

CORPORATE SOURCE: CURE: Digestive Diseases Research Center, VA Medical Center, Department of Medicine and Brain Research Institute, UCLA, Los Angeles, CA, 90073, USA

SOURCE: European Journal of Pharmacology (1996), 296(2), 153-60

PUBLISHER: CODEN: EJPHAZ; ISSN: 0014-2999

DOCUMENT TYPE: Elsevier

LANGUAGE: Journal

English

AB **Somatostatin** and its analogs act in the brain to influence gastric acid secretion. Five different **somatostatin** receptor subtypes have been characterized (sst1 to sst5). We studied the influence of **somatostatin** (0.18-0.6 nmol/rat) and selective sst2, sst3 and sst5 receptor ligands on basal gastric acid secretion in conscious rats equipped with chronic gastric and intracerebroventricular (i.c.v.) cannulae. **Somatostatin**-14 (0.36 nmol/rat), the sst2, sst3 and sst5 receptor agonist, Des-AA1,2,4,5,12,13-[D-Trp8,D-Cys14] **somatostatin** (SMS 201-995) (0.18-0.36 nmol/rat) and the sst5 receptor agonist, BIM-23052, (0.8-1.2 nmol/rat) injected i.c.v. inhibited gastric acid secretion. Maximal inhibition reaching 42%, 60% and 42% was induced by **somatostatin**-14 (0.36 nmol/rat), SMS 201-995 (0.18 nmol/rat) and BIM-23052 (0.8 nmol/rat), resp. The sst2 receptor agonist, DC 32-87 (0.2-0.8 nmol/rat) and sst3 receptor agonist, BIM-23056 (0.2-1.2 nmol/rat), did not modify gastric acid secretion, except the sst3 receptor agonist at 0.4 nmol/rat which increased acid output at 20 min post-injection. The sst2 receptor agonists (0.4 nmol/rat) co-injected i.c.v with a subthreshold dose of sst5 agonist (0.4 nmol/rat) inhibited gastric acid secretion. These results show that i.c.v. injection of **somatostatin**-14 inhibits basal gastric acid secretion in conscious rats through an action on sst5 receptor subtype which can be potentiated by sst2 receptor subtype.

IT 51110-01-1, **Somatostatin**-14 173484-74-7

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(**somatostatin** receptor subtypes involved in inhibition of gastric acid secretion)

L87 ANSWER 24 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1995:966879 HCAPLUS

DOCUMENT NUMBER: 124:75755

TITLE: Morphine cross-reacts with **somatostatin** receptor SSTR2 in the T47D human breast cancer cell line and decreases cell growth

AUTHOR(S): Hatzoglou, Anastassia; Ouafik, L'Houcine; Bakogeorgou, Efsthathia; Thermos, Kyriaki; Castanas, Elias

CORPORATE SOURCE: School Medicine, University Crete, Crete, GR-71110, Greece

SOURCE: Cancer Research (1995), 55(23), 5632-6

PUBLISHER: CODEN: CNREA8; ISSN: 0008-5472

DOCUMENT TYPE: American Association for Cancer Research

Journal

LANGUAGE: English

AB In a previous study, we found that morphine decreases, in a dose-dependent manner, the cell growth of T47D human breast cancer cells, despite the lack of  $\mu$ -opioid receptors and an interaction of morphine with other opioid sites. We have therefore examd. a possible interaction of morphine with other membrane receptor systems of the cell. The present study describes for the first time an interaction between  $\mu$ -acting opioid drugs and the **somatostatinergic** system. We have found that [125I]Tyr11-**somatostatin** binds with high affinity to T47D cells. Anal. of the binding data showed the presence of two components: one with high affinity but low capacity (Kd, 0.145 nM; 1450 sites/cell), and another of lower affinity but higher capacity (Kd, 1.192 nM; 11,920 sites/cell). **Somatostatin-14** and **somatostatin-28** showed multiphasic displacement curves, indicating heterogeneity of binding sites. The latter was confirmed by reverse transcription-PCR, with revealed the existence of the **somatostatin** receptor subtypes 2 and 3 (SSTR2 and SSTR3), with a relative mRNA concn. of 85 and 15%, resp. Morphine and the morphinomimetic peptide morphiceptine (Tyr-Pro-Phe-Pro-NH<sub>2</sub>) displace **somatostatin** from its binding sites. Further anal. indicated that  $\mu$ -acting opioids interact with the SSTR2 receptor subtypes.

IT 75037-27-3, **Somatostatin-28** 150957-55-4, BIM 23034C

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(morphine cross-reaction with **somatostatin** receptor SSTR2 in T47D human breast cancer cell line and inhibition of cell growth)

IT 51110-01-1, **Somatostatin**

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(morphine cross-reaction with **somatostatin** receptor SSTR2 in T47D human breast cancer cell line and inhibition of cell growth)

L87 ANSWER 25 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1995:964957 HCAPLUS

DOCUMENT NUMBER: 124:46620

TITLE: Neuromedin B receptor antagonists which demonstrate selectivity

INVENTOR(S): Coy, David H.; Taylor, John E.

PATENT ASSIGNEE(S): Biomeasure, inc., USA; Tulane Educational Fund.

SOURCE: U.S., 15 pp. Cont.-in-part of U.S. Ser. No. 919,537, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5462926	A	19951031	US 1993-78419	19930617 <--
WO 9402163	A1	19940203	WO 1993-US7036	19930727 <--
W: AU, CA, CZ, FI, HU, JP, NO, PL, PT, RU				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 606463	A1	19940720	EP 1993-918408	19930727 <--
EP 606463	B1	20011004		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 06511495	T2	19941222	JP 1993-504762	19930727 <--
AU 672426	B2	19961003	AU 1993-47871	19930727 <--
AU 9347871	A1	19940214		
AT 206307	E	20011015	AT 1993-918408	19930727
ES 2162822	T3	20020116	ES 1993-918408	19930727
NO 9401123	A	19940325	NO 1994-1123	19940325 <--

US 5569741  
PRIORITY APPLN. INFO.:

A 19961029

US 1994-352392 19941208 <--  
US 1992-919537 B2 19920727  
US 1993-78419 A 19930617  
WO 1993-US7036 W 19930727

AB Certain cyclic **somatostatin** octapeptide analogs functioned as neuromedin B receptor antagonists and had a >100-fold higher affinity for neuromedin B receptor than for gastrin-releasing peptide receptor. The most potent analog, D-Nal-cyclo-(Cys-Tyr-D-Trp-Lys-Val-Cys)-Nal-NH<sub>2</sub>, inhibited binding of <sup>125</sup>I-labeled [D-Tyr<sup>0</sup>]-neuromedin B to neuromedin B receptors on neuromedin B receptor transfected 3T3 cells (K<sub>d</sub> 216 nM) and on glioblastoma C-6 cells (K<sub>d</sub> 59 nM). Structure-activity studies on various related cyclic **somatostatin** octapeptide analogs indicated that stereochem. at positions 1, 2, 7, and 8, the hydrophobicity and ring size of the substitution in positions 1, 3, and 4, and the basicity of the group in position 5 all were important in detg. neuromedin B receptor affinity.

IT 38916-34-6D, Cyclic **somatostatin**, octapeptide analogs  
111857-96-6, D-Nal-cyclo-(Cys-Tyr-D-Trp-Lys-Val-Cys)-Nal-NH<sub>2</sub>  
121715-54-6, D-Phe-cyclo-(Cys-Tyr-D-Trp-Lys-Val-Cys)-Nal-NH<sub>2</sub>  
150155-55-8, D-Phe-cyclo-(Cys-Tyr-D-Trp-Lys-Thr-Cys)-Nal-NH<sub>2</sub>  
152045-39-1, D-Nal-cyclo-(Cys-Tyr-D-Trp-Lys-Nal-Cys)-Nal-NH<sub>2</sub>  
152045-40-4, D-Nal-cyclo-(Cys-Tyr-D-Trp-Lys-Val-Cys)-D-Nal-NH<sub>2</sub>  
152045-41-5, Nal-cyclo-(Cys-Tyr-D-Trp-Lys-Val-Cys)-D-Nal-NH<sub>2</sub>  
152045-42-6, D-Nal-cyclo-(D-Cys-Tyr-D-Trp-Lys-Val-Cys)-Nal-NH<sub>2</sub>  
152045-43-7, D-Nal-cyclo-(Cys-Tyr-D-Trp-Lys-Val-D-Cys)-Nal-NH<sub>2</sub>  
152045-45-9, D-Nal-cyclo-(Cys-Tyr-D-Trp-Lys-Phe-Cys)-Nal-NH<sub>2</sub>  
152045-47-1, D-Phe-cyclo-(Cys-Tyr-D-Trp-Lys(iPr)-Thr-Cys)-Nal-NH<sub>2</sub>  
152045-48-2, D-Phe-cyclo-(Cys-Tyr-D-Trp-Lys(diethyl)-Thr-Cys)-Nal-NH<sub>2</sub>  
NH<sub>2</sub> 171894-23-8 171894-24-9 171894-25-0

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)  
(structure-activity of cyclic **somatostatin** octapeptide analogs as neuromedin B receptor antagonists)

L87 ANSWER 26 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1995:913632 HCAPLUS

DOCUMENT NUMBER: 123:322111

TITLE: **Somatostatin** analog pharmaceuticals for treating NSAID-induced gastrointestinal lesions or ulcers

INVENTOR(S): Buchhiet, Karl-Heinz; Engel, Guenter; Gamse, Rainer

PATENT ASSIGNEE(S): Germany

SOURCE: Can. Pat. Appl., 20 pp.

DOCUMENT TYPE: CODEN: CPXXEB

LANGUAGE: Patent

FAMILY ACC. NUM. COUNT: 1 English

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2142394	AA	19950815	CA 1995-2142394	19950213 <--
EP 671413	A1	19950913	EP 1995-810088	19950210 <--
R: AT, BE, CH, DE, ES, FR, GB, IT, LI				
JP 07258108	A2	19951009	JP 1995-23845	19950213 <--
PRIORITY APPLN. INFO.:			GB 1994-2767	19940214
OTHER SOURCE(S):				

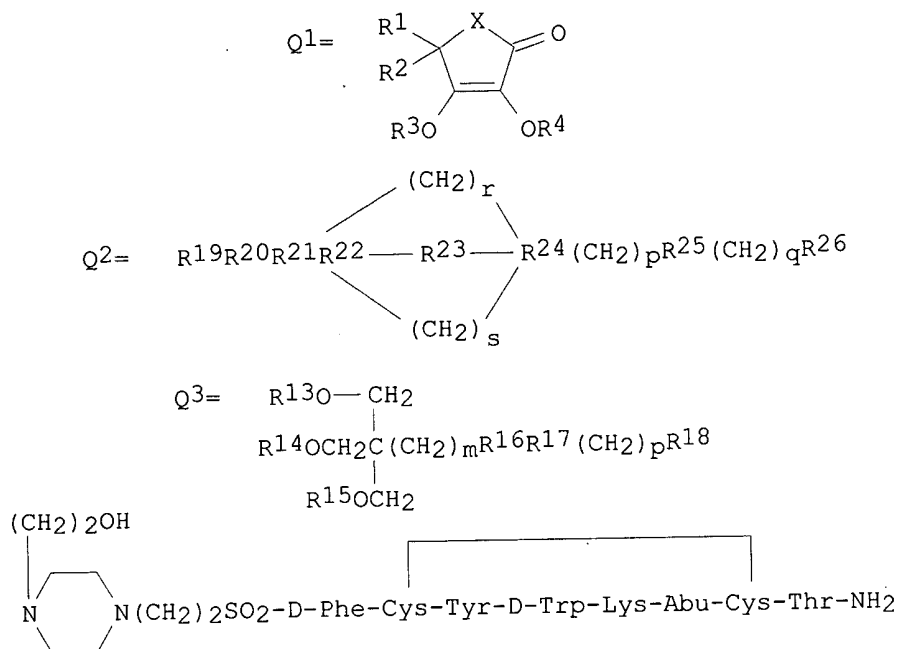
AB **Somatostatin** analogs are used in the manuf. of pharmaceutical compns. for use in preventing or treating NSAID induced gastrointestinal lesions or ulcers. An example injectable compn. contained octreotide.

IT 51110-01-1D, **Somatostatin**, analogs 121715-54-6  
170155-96-1

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (somatostatin analog pharmaceuticals for treating  
 NSAID-induced gastrointestinal lesions or ulcers)

L87 ANSWER 27 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1995:806295 HCAPLUS  
 DOCUMENT NUMBER: 123:228909  
 TITLE: Preparation of therapeutic peptide derivatives.  
 INVENTOR(S): Kim, Sun Hyuk; Dong, Zhengxin; Taylor, John E.;  
 Moreau, Sylviane; Keyes, Susan Riley  
 PATENT ASSIGNEE(S): Biomeasure, Inc., USA  
 SOURCE: PCT Int. Appl., 47 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9504752	A1	19950216	WO 1994-US8875	19940808 <--
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN				
RW: KE, MW, SD, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2168113	AA	19950216	CA 1994-2168113	19940808 <--
CA 2168113	C	20021001		
AU 9474819	A1	19950228	AU 1994-74819	19940808 <--
AU 689490	B2	19980402		
HU 73491	A2	19960828	HU 1996-281	19940808 <--
CN 1133047	A	19961009	CN 1994-193717	19940808 <--
CN 1055700	B	20000823		
JP 09501177	T2	19970204	JP 1994-506541	19940808 <--
EP 788509	A1	19970813	EP 1994-924590	19940808 <--
EP 788509	B1	20030528		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
RU 2133252	C1	19990720	RU 1996-104340	19940808 <--
SG 75092	A1	20000919	SG 1996-5779	19940808 <--
PL 180612	B1	20010330	PL 1994-312989	19940808
EP 1288223	A1	20030305	EP 2002-26862	19940808
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT				
EP 1288224	A1	20030305	EP 2002-26863	19940808
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT				
AT 241643	E	20030615	AT 1994-924590	19940808
ZA 9405966	A	19950626	ZA 1994-5966	19940809 <--
FI 9600584	A	19960208	FI 1996-584	19960208 <--
LT 4078	B	19960725	LT 1996-25	19960306 <--
LV 11549	B	19970420	LV 1996-71	19960308 <--
CZ 289590	B6	20020213	CZ 2000-1032	20000322
CZ 289552	B6	20020213	CZ 2000-1033	20000322
PRIORITY APPLN. INFO.:			US 1993-104194	A 19930809
			EP 1994-924590	A3 19940808
			WO 1994-US8875	W 19940808
OTHER SOURCE(S):	MARPAT 123:228909			
GI				



AB Peptide derivs. contg. .gtoreq.1 of Q1, Q2, Q3 [X = O, S, NR5; R5 = H, alkyl; R1, R2 = H, (CH2)mOR6, CH(OR7)CH2OR8; R6, R13, R15 = H, acyl; R7, R8 = H, acyl, CR9R10; R9 = H, alkyl; R1R2 = :CHCH2OR11; R11 = H, acyl; m, n = 1-5; one of R3, R4 = (CH2)nR12, (CH2)nCH(OH)R12, the other = H, hydroxyalkyl, acyl; R12 = CO, CH2, SO2; R16 = HN, null; R17 = CO, O, null; R18 = CO, CH2, SO2, null; p, q, r, s = 0-5; R19 = H, NH2, arom. functional group, OH, hydroxyalkyl, SO3H, null, etc.; R20 = O, null; R21 = alkyl, null; R22 = N, O, C, CH; R23 = alkyl, null; R24 = N, CH, C; R25 = NH, O, null; R26 = SO2, CO, CH2, null] attached to the peptide by a CO-N, CH2-N, or SO2-N bond, were prepd. Thus, **somatostatin** deriv (I) (soln. phase prepn. given) at 100 nM in AR42J pancreas tumor cells gave 66.4% control of cell growth.

IT **9002-72-6DP, Somatotropin**, derivs. **9034-39-3DP**,  
 , Growth hormone releasing factor, derivs. **51110-01-1DP**,  
**Somatostatin**, derivs. **168016-89-5P 168017-03-6DP**  
 , derivs.

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of therapeutic peptide derivs.)

IT **168017-01-4**  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prepn. of therapeutic peptide derivs.)

L87 ANSWER 28 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1995:252000 HCAPLUS

DOCUMENT NUMBER: 122:46704

TITLE: Subtype selectivity of peptide analogs for all five cloned human **somatostatin** receptors (hsstr 1-5)

AUTHOR(S): Patel, Yogesh C.; Srikant, Coimbatore B.  
 CORPORATE SOURCE: Fraser Lab., McGill Univ., Montreal, QC, H3A 1A1, Can.

SOURCE: Endocrinology (1994), 135(6), 2814-17  
 CODEN: ENDOAO; ISSN: 0013-7227

PUBLISHER: Endocrine Society

DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Recent reports (Raynor et al) have claimed the identification of potent **somatostatin** (SST) agonists exhibiting binding affinities of 1-2 pM and up to 30,000-fold binding selectivity for several of the 5 cloned sstr subtypes. These conclusions, however, are based on binding comparisons of sstr subtypes from different species expressed in different cell lines and studied with different radioligands. To eliminate the effect of species and/or methodol. variations, we have investigated agonist selectivity of 32 synthetic SST analogs for all 5 hsstrs stably expressed in CHO-K1 cells under identical binding conditions. We show that hsstr2, 3, 5 react potentially with hexapeptide as well as cyclic and linear octapeptide analogs and belong to a similar sstr subclass. Hsstr1 and 4 react poorly with these analogs and belong to a sep. subclass. The present generation of SST analogs exhibit a modest .apprx. 50-fold increase in binding potency compared to SST-14 for 2 subtypes (hsstr2, 3), and relative selectivity for only 2 subtype (hsstr2) which is at best only 35- fold. The potency and degree of selectivity of these analogs is several orders of magnitude less than that reported earlier and suggests the need for caution in using these compds. as putative superagonists or subtype selective compds. for any of the individual sstrs.

IT **51110-01-1, Somatostatin-14 58976-46-8,**  
**D-Trp8-somatostatin-14 75037-27-3,**  
**Somatostatin-28 77909-99-0, Leu8, D-trp22, tyr25-**  
**somatostatin-28 111857-95-5, BIM 23034**  
**111857-96-6, BIM 23042 150155-55-8, BIM 23060**  
**150155-57-0, EC 5-21 150155-58-1, NC 4-28B**  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (somatostatin receptor subtype selectivity of)

IT **51110-01-1D, Somatostatin, analogs**  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (somatostatin receptor subtype specificity of)

L87 ANSWER 29 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1994:290830 HCAPLUS  
 DOCUMENT NUMBER: 120:290830  
 TITLE: Neuromedin B receptor antagonists  
 INVENTOR(S): Coy, David H.; Taylor, John E.  
 PATENT ASSIGNEE(S): Administrators of the Tulane Educational Fund, USA;  
 Biomeasure, Inc.  
 SOURCE: PCT Int. Appl., 41 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9402163	A1	19940203	WO 1993-US7036	19930727 <--
W: AU, CA, CZ, FI, HU, JP, NO, PL, PT, RU				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5462926	A	19951031	US 1993-78419	19930617 <--
EP 606463	A1	19940720	EP 1993-918408	19930727 <--
EP 606463	B1	20011004		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 06511495	T2	19941222	JP 1993-504762	19930727 <--
AU 672426	B2	19961003	AU 1993-47871	19930727 <--
AU 9347871	A1	19940214		
AT 206307	E	20011015	AT 1993-918408	19930727
NO 9401123	A	19940325	NO 1994-1123	19940325 <--

## PRIORITY APPLN. INFO.:

US 1992-919537 A 19920727  
 US 1993-78419 A 19930617  
 WO 1993-US7036 W 19930727

OTHER SOURCE(S): MARPAT 120:290830

AB A method of selectively inhibiting biochem. activity of cells induced by neuromedin B comprises contacting cells which contain neuromedin B receptors with a cyclic octapeptide, D-Nal-Cys-Tyr-D-Trp-Lys-Val-Cys-Nal-NH<sub>2</sub> (I), or an analog thereof. Certain **somatostatin** octapeptide analogs function as neuromedin B receptor antagonists and have >100-fold higher affinity for neuromedin B receptors than for gastrin-releasing peptide receptors. The most potent analog, I, inhibited binding of radioiodinated [D-Tyr<sup>0</sup>]neuromedin B to receptors on neuromedin B receptor-transfected 3T3 cells (K<sub>d</sub> 216 nM) and on glioblastoma C-6 cells (K<sub>d</sub> 59 nM). Structure-function studies with I analogs indicated that the stereochem. at positions 1, 2, 7, and 8; the hydrophobicity and ring size of the substitution at positions 1, 3, and 4; and the basicity of the group at position 5 all were important in detg. receptor affinity.

IT 154896-98-7 154897-00-4 154897-01-5  
 154897-02-6 154897-03-7 154897-04-8  
 154897-05-9 154897-09-3 154897-10-6  
 154897-11-7 154897-12-8 154897-13-9  
 154897-14-0

RL: BIOL (Biological study)  
 (somatostatin octapeptide analog, neuromedin B receptor antagonist activity of)

IT 154896-98-7

RL: BIOL (Biological study)  
 (somatostatin octapeptide, neuromedin B receptor antagonist activity of)

L87 ANSWER 30 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1994:183172 HCAPLUS

DOCUMENT NUMBER: 120:183172

TITLE: Inhibition of angiogenesis by **somatostatin**  
 and **somatostatin**-like compounds is  
 structurally dependent

AUTHOR(S): Barrie, Rosemary; Woltering, Eugene A.; Hajarizadeh,  
 Homayon; Mueller, Charles; Ure, Tina; Fletcher,  
 William S.

CORPORATE SOURCE: Dep. Surg., Oregon Health Sci. Univ., Portland, OR,  
 97201, USA

SOURCE: Journal of Surgical Research (1993), 55(4),  
 446-50

CODEN: JSGRA2; ISSN: 0022-4804

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The authors have previously demonstrated that **somatostatin** analogs SMS 201-995 and RC-160 inhibit angiogenesis using the chorioallantoic membrane (CAM) of the developing chicken embryo. In this study, the ability of native **somatostatin**-14 and 9 **somatostatin** analogs to inhibit angiogenesis was evaluated. Methylcellulose disks (2 mm) contg. 50 .mu.g of **somatostatin** or **somatostatin** analog were implanted on the CAM of 6-7-day-old shell-less chick embryos. Inhibition of blood vessel growth was visually assessed and graded in the region of the disk 24-36 h following implementation. The analogs SMS 201-995 and RC-160 showed statistically significant inhibition of neovascularization when compared to native **somatostatin**-14. The amino acid homol. comparison of the 9 analogs revealed that individual differences in their abilities to inhibit angiogenesis may be structurally dependent.

IT 51110-01-1, Somatostatin-14 111857-95-5, BIM  
 23034

RL: BIOL (Biological study)



(angiogenesis inhibition by, structure in relation to)

L87 ANSWER 31 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1994:46123 HCAPLUS  
 DOCUMENT NUMBER: 120:46123  
 TITLE: Discovery of a novel class of neuromedin B receptor antagonists, substituted **somatostatin** analogs  
 AUTHOR(S): Orbuch, Murray; Taylor, John E.; Coy, David H.; Mrozinski, John E., Jr.; Mantey, Samuel A.; Battey, James F.; Moreau, Jacques Pierre; Jensen, Robert T.  
 CORPORATE SOURCE: Dig. Dis. Branch, Natl. Inst. Diabetes Dig. Kidney Dis., Bethesda, MD, 20892, USA  
 SOURCE: Molecular Pharmacology (1993), 44(4), 841-50  
 CODEN: MOPMA3; ISSN: 0026-895X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Bombesin-related peptides have widespread activities in the central nervous system and peripheral tissues. Recent studies show 2 subtypes of receptors; a gastrin-releasing peptide (GRP) receptor subtype and a neuromedin B (NMB) receptor subtype exist. In contrast to the GRP receptor, no antagonists exist for the NMB receptor. In the present study the authors report that certain **somatostatin** (SS) octapeptide analogs function as selective NMB receptor antagonists. The most potent analog, D-Nal-Cys-Tyr-D-Trp-Lys-Val-Cys-Nal-NH<sub>2</sub>, inhibited binding of <sup>125</sup>I-[D-Tyro]NMB to NMB receptor-transfected 3T3 cells and C6 cells. This analog had 100-fold lower affinity for GRP receptors. Structure-function studies were performed by synthesizing 18 structurally related SS octapeptide analogs; each of these analogs, but not native SS-14 or SS-28, also inhibited binding to NMB receptors. The stereochem. at positions 1, 2, 7, and 8, the hydrophobicity and ring size of the substitution in positions 1, 3, and 4, and the basicity of the group in position 5 were all important in detg. NMB receptor affinity. No SS octapeptide analog increased [<sup>3</sup>H]inositol phosphates in NMB receptor-transfected cells; however, each analog inhibited NMB-stimulated increases. The most potent analog, D-Nal-Cys-Tyr-D-Trp-Lys-Val-Cys-Nal-NH<sub>2</sub>, caused a parallel rightward shift of the NMB dose-response curve, the Schild plot slope was not different from unity, and the affinity was 230 nM. SS octapeptide analogs also interacted with SS receptors and  $\mu$ -opioid receptors; however, there was no correlation between the affinities of the analogs for these receptors and their affinities for NMB receptors, demonstrating that these activities can be sepd. The results demonstrate for the first time a class of antagonists with >100-fold selectivity for NMB vs. GRP receptors. Because the structural requirements for detg. NMB, SS, and  $\mu$ -opioid receptor activity differ, it is likely that highly selective, specific, high affinity NMB receptor antagonists can now be developed that will be useful in defining the role of NMB in various physiol. processes.

IT 38916-34-6, **Somatostatin** (sheep) 73032-94-7,  
 Cyclic **somatostatin**-28 111857-96-6 144776-53-4  
 150155-55-8 152045-39-1 152045-40-4  
 152045-41-5 152045-42-6 152045-43-7  
 152045-45-9 152045-47-1 152045-48-2  
 RL: BIOL (Biological study)  
 (neuromedin B receptor-inhibiting activity of, structure in relation to)

L87 ANSWER 32 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1993:617427 HCAPLUS  
 DOCUMENT NUMBER: 119:217427  
 TITLE: Treatment of acute migraine or cluster headache attacks with **somatostatin** analogs or derivatives  
 INVENTOR(S): Hirt, Dorothea; Lataste, Xavier

PATENT ASSIGNEE(S): Sandoz-Erfindungen Verwaltungsgesellschaft m.b.H.,  
Austria; Sandoz-Patent-G.m.b.H.; Sandoz Ltd.  
SOURCE: PCT Int. Appl., 29 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9317037	A1	19930902	WO 1993-EP366	19930216 <--
W: CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRIORITY APPLN. INFO.:		GB 1992-3769		19920221
OTHER SOURCE(S): MARPAT 119:217427				
AB Acute migraine or cluster headache attacks are treated by nasal administration of <b>somatostatin</b> analogs or derivs. Patients treated nasally with octreotide at 0.5-2 mg had an onset of action within 10-20 min. Nasal formulations are given.				
IT 51110-01-1D, <b>Somatostatin</b> , analogs and derivs.				
144776-53-4 151009-92-6				
RL: BIOL (Biological study)				
(cluster headache or migraine nasal treatment with)				

L87 ANSWER 33 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1993:617391 HCAPLUS  
DOCUMENT NUMBER: 119:217391  
TITLE: Hepatoma treatment with **somatostatin** analogs  
INVENTOR(S): Bogden, Arthur E.  
PATENT ASSIGNEE(S): Biomeasure, Inc., USA  
SOURCE: PCT Int. Appl., 19 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9316718	A1	19930902	WO 1993-US1679	19930225 <--
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5411943	A	19950502	US 1992-840881	19920225 <--
CA 2107773	AA	19930826	CA 1993-2107773	19930225 <--
EP 585444	A1	19940309	EP 1993-907029	19930225 <--
EP 585444	B1	20010725		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 06507423	T2	19940825	JP 1993-515069	19930225 <--
AT 203410	E	20010815	AT 1993-907029	19930225
ES 2160595	T3	20011116	ES 1993-907029	19930225
HK 1015123	A1	20020705	HK 1998-117598	19981228
PRIORITY APPLN. INFO.:		US 1992-840881		A 19920225
		WO 1993-US1679		W 19930225
OTHER SOURCE(S): MARPAT 119:217391				
AB Hepatomas in mammals are treated by administering octapeptide <b>somatostatin</b> analogs A1-Cys-A2-D-Trp-Lys-A3-Cys-A4-Y [A1 = D-.beta.-Nal; D-Phe; A2 = Phe, pentafluoro-Phe, p-substituted X-Phe (X = halo, NH2, NO2, OH, Cl-3 alkyl); A3 = Thr, Ser, Phe, Val, .alpha.-aminobutyric acid, Ile; A4 = Thr, .beta.-Nal, Trp; Y = NH2, OH] or acceptable salts or complexes. D-.beta.-Nal-Cys-Tyr-D-Trp-Lys-Val-Cys-Thr-NH2, prep'd. by solid phase synthesis on benzhydrylamine-polystyrene resin, inhibited the growth of M5123 hepatomas in mice.				

IT 145758-77-6 150957-55-4  
 RL: BIOL (Biological study)  
 (hepatoma inhibitor)  
 IT 51110-01-1D, **Somatostatin**, analogs  
 RL: BIOL (Biological study)  
 (hepatoma inhibitors)

L87 ANSWER 34 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1993:73774 HCAPLUS  
 DOCUMENT NUMBER: 118:73774  
 TITLE: Analogs of **somatostatin** bind selectively to  
 brain **somatostatin** receptor subtypes  
 AUTHOR(S): Raynor, Karen; Coy, David C.; Reisine, Terry  
 CORPORATE SOURCE: Sch. Med., Univ. Pennsylvania, Philadelphia, PA,  
 19104, USA  
 SOURCE: Journal of Neurochemistry (1992), 59(4),  
 1241-50  
 CODEN: JONRA9; ISSN: 0022-3042  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB The present study examd. the selectivities of a series of structurally  
 diverse **somatostatin** (SRIF) analogs for SRIF receptor subtypes.  
 SRIF receptors were labeled by 125I-Tyr11-SRIF, which has  
 indistinguishable affinities for SRIF receptor subtypes. The inhibition  
 by MK-678 was incomplete, indicating this peptide is highly selective for  
 a subtype of SRIF receptor termed the SRIF1 receptor. The binding of  
 125I-MK-678 to SRIF1 receptors was monophasically inhibited by SRIF, the  
 octapeptides (such as SMS-201-995), and the hexapeptides (such as MK-678),  
 consistent with the highly selective labeling of a subtype of SRIF  
 receptor. In contrast, the smaller CGP-23996-like analogs did not inhibit  
 125IMK-678 binding to SRIF1 receptors. The binding of 125I-CGP-23996 to  
 SRIF receptors was inhibited by SRIF and the octapeptides with Hill  
 coeffs. of <1, indicating that 125I-CGP-23996 labels multiple SRIF  
 receptor subtypes. The hexapeptides and CGP-23996-like compds. produced  
 only partial inhibitions of 125I-CGP-23996 binding, which were additive,  
 indicating selective interactions of these compds. with the different  
 receptor subpopulations labeled by 125I-CGP-23996. 125I-Tyr11-SRIF  
 binding and 125I-CGP-23996 binding to SRIF receptors were like-wise only  
 partially affected by 100 .mu.M GTP.gamma.S, a concn. that completely  
 abolishes specific 125I-MK-678 binding to SRIF1 receptors. The component  
 of 125I-CGP-23996 labeling that was sensitive to GTP.gamma.S was also  
 MK-678 sensitive. Thus, 2 subpopulations of SRIF receptors exist in the  
 CNS. The SRIF1 receptor is sensitive to cyclic hexapeptides such as  
 MK-678 and to GTP.gamma.S but insensitive to smaller CGP-23996-like  
 compds. The SRIF2 receptor is sensitive to the CGP-23996-like compds. and  
 can be selectively labeled by 125I-CGP-23996 in the presence of high  
 concns. of the hexapeptides or GTP.gamma.S because, unlike the SRIF1  
 receptor, the SRIF2 receptor is insensitive to these agents.

IT 51110-01-1, **Somatostatin** 51110-01-1D,  
**Somatostatin**, analogs 75037-27-3, **Somatostatin**  
 28 145758-77-6  
 RL: BIOL (Biological study)  
 (**somatostatin** receptor subtypes of brain binding of ligands  
 inhibition by)

L87 ANSWER 35 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1993:806 HCAPLUS  
 DOCUMENT NUMBER: 118:806  
 TITLE: Method of treating benign and malignant proliferative  
 skin disease by topical administration of a  
**somatostatin** analog  
 INVENTOR(S): Bogden, Arthur E.; Moreau, Jacques Pierre  
 PATENT ASSIGNEE(S): Biomeasure, Inc., USA

SOURCE: PCT Int. Appl., 25 pp.  
DOCUMENT TYPE: CODEN: PIXXD2  
LANGUAGE: Patent  
FAMILY ACC. NUM. COUNT: 1 English  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9213554	A1	19920820	WO 1992-US1027	19920207 <--
W: CA, CS, FI, HU, JP, NO, RU				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
EP 542934	A1	19930526	EP 1992-906420	19920207 <--
EP 542934	B1	19990616		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
JP 05506254	T2	19930916	JP 1992-505872	19920207 <--
AT 181240	E	19990715	AT 1992-906420	19920207 <--
ES 2134798	T3	19991016	ES 1992-906420	19920207 <--
US 6087337	A	20000711	US 1993-89410	19930709 <--
PRIORITY APPLN. INFO.:			US 1991-652863 A	19910208
			WO 1992-US1027 W	19920207

OTHER SOURCE(S): MARPAT 118:806

AB A compn. for treating a mammal suffering from benign or malignant proliferative skin disease comprises an effective amt. of a **somatostatin** analog contg. .gtoreq.6 amino acids, formulated with an excipient suitable for topical administration to the mammal. D-.beta.-Naphthyl-Ala-Cys-Tyr-D-Trp-Lys-Val-Cys-Thr-NH2 was synthesized on benzhydrylamine-polystyrene resin. B16-F10 melanoma xenografts in mice were treated with topical somatuline.

IT **51110-01-1D, Somatostatin**, analogs **144776-53-4**  
RL: BIOL (Biological study)  
(benign or malignant proliferative skin disease topical treatment with)

L87 ANSWER 36 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1992:152405 HCAPLUS  
DOCUMENT NUMBER: 116:152405  
TITLE: Preparation of **somatostatin** analogs  
INVENTOR(S): Schally, Andrew V.; Janaky, Tamas; Cai, Ren Zhi  
PATENT ASSIGNEE(S): Tulane Educational Fund, Inc., USA  
SOURCE: Eur. Pat. Appl., 28 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 450480	A2	19911009	EP 1991-104845	19910327 <--
EP 450480	A3	19911218		
EP 450480	B1	19950621		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
ES 2075244	T3	19951001	ES 1991-104845	19910327 <--
CA 2039880	AA	19911007	CA 1991-2039880	19910405 <--
AU 9174105	A1	19911010	AU 1991-74105	19910405 <--
AU 638118	B2	19930617		
HU 59165	A2	19920428	HU 1991-1117	19910405 <--
JP 06041194	A2	19940215	JP 1991-72935	19910405 <--
PRIORITY APPLN. INFO.:			US 1990-505501	19900406
OTHER SOURCE(S):				
GI For diagram(s), see printed CA Issue.				
AB The title compds. I [Q = H, L- or D-Mel, Mel-Mel, cyclopropanealkanoic acid residue, etc.; Mel = 4-[bis(2-chloroethyl)amino]phenylalanine				

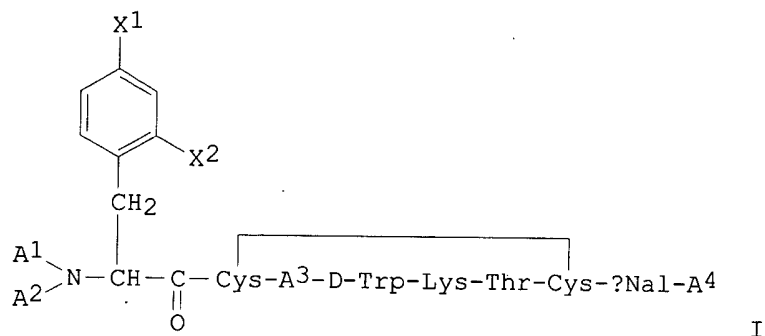
residue; R1 = L- or D-Phe, D-Trp, L- or D-Mel; R3 = Mel, Tyr, Phe; R6 = Thr, Val; R8 = Thr, Trp, Mel] and II [R1 = L- or D-Phe, L- or D-Trp; R3 = Phe, Trp; R6 same as defined above; R8 = Thr, Trp; A = -HNCH<sub>2</sub>(CH<sub>2</sub>)<sub>m</sub>CH(NH)(CH<sub>2</sub>)<sub>n</sub>CO-; m, n = 0, 1; Q1 = cytotoxic moiety] and their pharmaceutical acceptable salts were prepd. Successive coupling of BOC-Thr(Bzl)-OH, BOC-Cys(MBzl)-OH, BOC-Val-OH, BOC-Lys[Z(2-Cl)]-OH, BOC-D-Trp-OH, BOC-Tyr[Z(2-Br)]-OH, BOC-Cys(MBzl)-OH, and BOC-Mel-OH [Bzl = benzyl, MBzl = methylbenzyl] to a benzhydrylamine resin, cleavage of the resulting peptide from the resin, oxidn., and deprotection gave I [Q = H, R1 = Mel, R3 = R8 = Tyr, R6 = Val] (III). In an in vitro study using dispersed rat pituitary cell superfusion system the affinity consts. of III to rat cortex and prostate tumor cell membranes were 13.355 and 1.378 .times. 10<sup>9</sup>M<sup>-1</sup>, resp., compared with 15.795 and 1.378 .times. 10<sup>9</sup>M<sup>-1</sup> for **somatostatin** (1-14).

IT **51110-01-1DP, Somatostatin, analogs**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

IT **139692-67-4P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, as **somatostatin** analog)

L87 ANSWER 37 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1992:52344 HCAPLUS  
 DOCUMENT NUMBER: 116:52344  
 TITLE: Octapeptide analogs of **somatostatin** having  
 threonine at the sixth position  
 INVENTOR(S): Coy, David H.; Murphy, William A.  
 PATENT ASSIGNEE(S): Tulane Educational Fund, Inc., USA  
 SOURCE: PCT Int. Appl., 16 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9109056	A1	19910627	WO 1990-US7074	19901204 <--
W: CA, HU, JP, KR				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
CA 2046594	AA	19910609	CA 1990-2046594	19901204 <--
EP 457888	A1	19911127	EP 1991-901181	19901204 <--
EP 457888	B1	19960710		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
HU 59166	A2	19920428	HU 1991-2648	19901204 <--
JP 04505456	T2	19920924	JP 1991-501584	19901204 <--
AT 140237	E	19960715	AT 1991-901181	19901204 <--
ES 2091907	T3	19961116	ES 1991-901181	19901204 <--
JP 2925321	B2	19990728	JP 1990-501584	19901204 <--
ZA 9009896	A	19910925	ZA 1990-9896	19901210 <--
PRIORITY APPLN. INFO.:				
US 1989-447876 19891208				
WO 1990-US7074 19901204				
OTHER SOURCE(S): MARPAT 116:52344				
GI				



- AB The title **somatostatin** analogs I (A1,A2 = H, C1-12 alkyl, C7-10 phenylalkyl, R1CO, R2OCO; R1 = C1-20 alkyl, C3-20 alkenyl, C3-20 alkenyl, Ph, naphthyl, C7-10 phenylalkyl; R2 = C1-10 alkyl, C7-10 phenylalkyl; X1, X2 = H, F, Cl, Br, OH, Me, CF3; A3 = Phe, Tyr; A4 = OH, NH2, NHR3; R3 = satd. aliph. C1-8 alkyl; .beta.Nal = .beta.-naphthylalanine; with provisions) or pharmaceutically acceptable salts are used to treat a mammal in need of redn. of growth hormone, epidermal growth factor, insulin, glucagon, etc. Therapeutic compns. comprise I. Synthesis of reduced D-Phe-Cys-Phe-D-Trp-Lys-Val-Cys-.beta.Nal-NH2 is described.
- IT **9002-62-4**, Prolactin, biological studies **9002-72-6**, Growth hormone  
 RL: BIOL (Biological study)  
 (release of, inhibition of, with **somatostatin** octapeptide analogs)
- IT **138248-86-9 138248-87-0**  
 RL: BIOL (Biological study)  
 (**somatostatin** octapeptide analog)
- IT **138248-90-5**  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (synthesis of)
- IT **51110-01-1D, Somatostatin**, octapeptide analogs  
 RL: PROC (Process)  
 (threonine in sixth position of)
- L87 ANSWER 38 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1991:599065 HCAPLUS  
 DOCUMENT NUMBER: 115:199065  
 TITLE: Octapeptide analogs of **somatostatin** inhibit the clonal growth and vasoactive intestinal peptide-stimulated cyclic AMP formation in human small cell lung cancer cells  
 AUTHOR(S): Taylor, J. E.; Moreau, J. P.; Baptiste, L.; Moody, T. W.  
 CORPORATE SOURCE: Biomeasure Inc., Hopkinton, MA, 01748, USA  
 SOURCE: Peptides (New York, NY, United States) (1991), 12(4), 839-43  
 CODEN: PPTDD5; ISSN: 0196-9781  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English
- AB Two endocrinol. active octapeptide analog (BIM-23014 C and BIM-23034) of **somatostatin** (SRIF) contg. either an N- or C-terminal 3-(2-naphthyl)-D-Ala residue were examd. for their ability to inhibit the in vitro receptor binding, clonal growth, and VIP-stimulated cAMP formation in human small cell lung cancer cell (SCLC) line NCI-H345. Both SRIF peptides inhibited [125I]SRIF(Tyr11)-14 binding with IC50 values in the low nM range. Colony formation in the in vitro SCLC growth assay was also inhibited in the same concn. range, as was VIP-stimulated cAMP

formation. Therefore, octapeptide analogs of SRIF function as SCLC SRIF receptor agonists.

IT **51110-01-1D, Somatostatin**, octapeptide analogs  
**111857-95-5**, BIM 23034

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antitumor activity of, in human small cell lung carcinoma, receptor binding and VIP-induced cAMP formation in relation to)

L87 ANSWER 39 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1991:82559 HCAPLUS

DOCUMENT NUMBER: 114:82559

TITLE: Preparation of octapeptideamides as hormone release inhibitors or antagonists

INVENTOR(S): Eck, Charles R.; Moreau, Sylvianne

PATENT ASSIGNEE(S): Biomeasure, Inc., USA

SOURCE: Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 389180	A1	19900926	EP 1990-302760	19900315 <--
EP 389180	B1	19950104		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
CA 2012115	AA	19900915	CA 1990-2012115	19900314 <--
CA 2012115	C	20010703		
JP 02289599	A2	19901129	JP 1990-65511	19900315 <--
JP 2888912	B2	19990510		
ES 2068333	T3	19950416	ES 1990-302760	19900315 <--
PRIORITY APPLN. INFO.:			US 1989-323777	A 19890315

OTHER SOURCE(S): MARPAT 114:82559

AB R1R2NCHR3CO-Cys-Tyr(I)-D-Trp-Lys-X1-Cys-XNH2 [R1, R2 = H, alkyl, phenylalkyl, acyl, (phenyl)alkoxycarbonyl; R3 = CH2R4, R4 = pentafluorophenyl, naphthyl, pyridyl, (substituted) Ph; Tyr(I) = Tyr ring-iodinated at the 3- or 5-position; X1 = Thr, Ser, Phe, Val, Ile, .alpha.-aminobutyryl; X2 = Thr, Trp, .beta.-Nal], were prepd. as drugs (no data). Thus, D-.beta.-naphthylalanyl-Cys-Tyr(I)-D-Trp-Lys-Val-Cys-Thr-NH2 was prepd. using Me3CO2C-protected amino acids on benzhydrylamine resin followed by iodination with chloramine T/NaI in pH 7.4 phosphate buffer.

IT **9002-72-6**, Growth hormone

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (antagonists, octapeptideamides)

IT **51110-01-1P, Somatostatin**

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (octapeptide analogs, prepn. of, as hormone release inhibitors or antagonists)

IT **131799-90-1P 131799-91-2P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, as hormone release inhibitor or antagonist)

L87 ANSWER 40 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1990:235851 HCAPLUS

DOCUMENT NUMBER: 112:235851

TITLE: **Somatostatin** peptide hormone analogs for inhibition of blood vessel blockage

INVENTOR(S): Ramwell, Peter W.; Braquet, Pierre

PATENT ASSIGNEE(S): Societe d'Etudes de Produits Chimiques S. A., Fr.

SOURCE: PCT Int. Appl., 31 pp.

DOCUMENT TYPE: CODEN: PIXXD2  
 LANGUAGE: Patent  
 FAMILY ACC. NUM. COUNT: 1 English  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8912068	A2	19891214	WO 1989-US2352	19890602 <--
W: JP, US				
RW: BE, DE				
US 5147856	A	19920915	US 1989-329854	19890328 <--
EP 383856	A1	19900829	EP 1989-906914	19890602 <--
R: BE, DE				
JP 03500660	T2	19910214	JP 1989-506590	19890602 <--
JP 07025691	B4	19950322		
PRIORITY APPLN. INFO.:			GB 1988-13160	19880603
			US 1989-329854	19890328
			WO 1989-US2352	19890602

OTHER SOURCE(S): MARPAT 112:235851  
 GI

A1A2NCHA<sup>3</sup>COCys-A<sup>4</sup>-D-Trp-Lys-A<sup>5</sup>-Cys-DL-A<sup>7</sup>-Z

I

AB A method for inhibiting blood vessel blockage in a mammal comprises administering to a mammal before, during, and/or after a surgical procedure, e.g., angioplasty, arterial bypass, or an allograft transplant operation, an effective blood vessel blockage-inhibiting amt. of an octapeptide [I; A1, A2 = H, C1-12 alkyl, C7-12 phenylalkyl, (phenyl)alkanoyl, alkenoyl, PhCO, naphthylcarbonyl, (phenyl)alkoxycarbonyl; A3 = CH<sub>2</sub>A6; A4 = o-, m-, or p-XC<sub>6</sub>H<sub>4</sub>, C<sub>6</sub>F<sub>5</sub>, .beta.-Nal, Tyr; A5 = D- or L-Thr, Ser, Phe, Val, Ile, .alpha.-aminobutyric acid; A6 = (pentafluoro)phenyl, naphthyl, pyridyl; A7 = Thr, Trp, .beta.-Nal; .beta.-Nal = 3-(2-naphthyl)-D- or -L-Ala; X = halo, NH<sub>2</sub>, NO<sub>2</sub>, OH, alkyl; Z = NH<sub>2</sub>, OH]. In inhibition of allograft rejection, I is delivered preferably in conjunction with cyclosporin. Thus, angiopeptin, i.e. I (A1A2NCHA<sup>3</sup>CO = D-.beta.-Nal, A4 = Tyr, A5 = Val, D,L-A<sup>7</sup>-Z = Thr-NH<sub>2</sub>) and 2 other I were prepd. by the solid phase method on a benzhydrylamine resin. I at 20 or 50 .mu.g/kg/day in rats significantly inhibited myointimal proliferation of the carotid artery following endothelial injury by air drying.

IT 111857-95-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, as blood vessel blockage inhibitor)

IT 51110-01-1DP, Somatostatin, analogs

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, as blood vessel blockage inhibitors)

L87 ANSWER 41 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1990:92051 HCAPLUS

DOCUMENT NUMBER: 112:92051

TITLE: Inhibition of myointimal proliferation of the rat carotid artery by the peptides, angiopeptin and BIM 23034

AUTHOR(S): Lundergan, Connor; Foegh, Marie L.; Vargas, Roberto; Eufemio, Michael; Bormes, Gregory W.; Kot, Peter A.; Ramwell, Peter W.

CORPORATE SOURCE: Med. Cent., Georgetown Univ., Washington, DC, 20007,



USA  
 SOURCE: Atherosclerosis (Shannon, Ireland) (1989),  
 80(1), 49-55  
 CODEN: ATHSBL; ISSN: 0021-9150  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Myointimal proliferation of the rat carotid artery was inhibited by a synthetic peptide, angiopeptin, and its closely related congener, BIM 23034. Proliferation was initiated in the carotid artery of anesthetized rats by air-drying of the endothelium. After 15 days the rats were killed and the carotid artery was pressure-fixed and subjected to morphol. anal. for evaluation of the degree of myointimal thickening. Five synthetic **somatostatin**-like peptides were tested by pretreating rats (20 and 50 .mu.g/kg/rat, s.c. daily) for 2 days prior to and for 5 days after the endothelial injury. Angiopeptin and the closely related octapeptide (BIM 23034) inhibited myointimal thickening. Angiopeptin was also effective when the pretreatment period was reduced from 2 days to 30 min. The inhibitory effect of angiopeptin was further confirmed in an addnl. expt. involving [3H]thymidine incorporation. In this expt. angiopeptin (100 .mu.g/kg/day, s.c.) was also administered for 2 days prior to and 5 days following the endothelial injury and it inhibited thymidine uptake. All the peptides tested inhibit the release of growth hormone. However, only angiopeptin and BIM 23034 inhibited myointimal proliferation. Thus, the effect of angiopeptin and its congener is unlikely to be mediated through growth hormone. Since angiopeptin inhibits myointimal proliferation it may have clin. utility in preventing restenosis following angioplasty and coronary artery bypass procedures.

IT 111857-95-5, BIM 23034

RL: BIOL (Biological study)

(carotid artery myointimal proliferation inhibition by)

IT 51110-01-1D, **Somatostatin**, analogs

RL: BIOL (Biological study)

(carotid artery myointimal proliferation response to)

IT 9002-72-6, Growth hormone

RL: BIOL (Biological study)

(carotid artery myointimal proliferation response to  
**somatostatin** analogs in relation to)

L87 ANSWER 42 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1989:450777 HCAPLUS  
 Correction of: 1987:96459

DOCUMENT NUMBER: 111:50777  
 Correction of: 106:96459

TITLE: Synthesis and evaluation of activities of octapeptide analogs of **somatostatin**

AUTHOR(S): Cai, Ren Zhi; Szoke, Balazs; Fu, Dadin; Redding, Tommie W.; Colaluca, John; Torres-Aleman, I.; Schally, Andrew V.

CORPORATE SOURCE: Med. Cent., Tulane Univ., New Orleans, LA, 70146, USA  
 SOURCE: Pept.: Struct. Funct., Proc. Am. Pept. Symp., 9th (1985), 627-30  
 CODEN: 54ZNAJ

DOCUMENT TYPE: Conference

LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB The growth hormone (GH) secretion inhibiting activity of **somatostatin**-14 and 17 octapeptide analogs was presented and related to structure. The most active compd. RC121 (I), was 200-fold more inhibitory than **somatostatin**-14 on GH secretion. The activities of the analogs indicate the importance of the C- and N-terminal residues, esp. the C-terminal residue hydroxyl group. Other biol. activities of the analogs were also briefly discussed.

IT 51110-01-1, **Somatostatin** 103222-00-0

RL: BIOL (Biological study)  
 (growth hormone release inhibition by, structure in relation to)  
 IT **51110-01-1D, Somatostatin**, octapeptide analogs  
 RL: BIOL (Biological study)  
 (growth hormone secretion inhibition by, structure in relation to)  
 IT **9002-72-6, Somatotropin**  
 RL: BIOL (Biological study)  
 (release of, **somatostatin** octapeptide analogs effect on,  
 structure in relation to)

L87 ANSWER 43 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1989:450516 HCAPLUS  
 DOCUMENT NUMBER: 111:50516  
 TITLE: Receptor-selective **somatostatin** (SRIF)  
 analogs  
 AUTHOR(S): Coy, D. H.; Heiman, M. L.; Rossowski, J.; Murphy, W.  
 A.; Taylor, J. E.; Moreau, S.; Moreau, J. P.  
 CORPORATE SOURCE: Sch. Med., Tulane Univ., New Orleans, LA, 70112, USA  
 SOURCE: Pept.: Chem. Biol., Proc. Am. Pept. Symp. 10th (  
**1988**), Meeting Date 1987, 462-4. Editor(s):  
 Marshall, Garland R. ESCOM Sci. Pub.: Leiden, Neth.  
 CODEN: 56MDA6  
 DOCUMENT TYPE: Conference  
 LANGUAGE: English

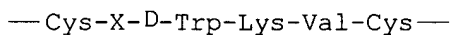
AB Octapeptide **somatostatin** (SRIF) analogs were examd. for binding  
 to receptors in rat pancreas, anterior pituitary, cerebral cortex, and  
 adrenal cortex. For SRIF ring sizes >8, receptor assays previously showed  
 no difference between binding to brain and pituitary receptors. However,  
 amidated octapeptide analogs had less affinity for cerebral cortex than  
 for pituitary receptors. A sudden and dramatic loss of binding affinity  
 for brain receptors was obsd. in a D-Nal-contg. analog (position 1), where  
 Nal stands for .beta.-naphthylalanine. This peptide maintained its  
 affinity for pancreas, pituitary, and adrenal receptors but was devoid of  
 affinity for gastric mucosa receptors. Another octapeptide with L-Nal at  
 its C-terminus also dissocd. pituitary and brain binding but had high  
 affinity for pancreatic and adrenal receptors relative to pituitary  
 receptors suggesting the existence of another subset of SRIF receptors.  
 Equal affinity of a hexapeptide analog for both brain and pituitary  
 receptors and for pancreatic and adrenal tissue indicated another major  
 class of SRIF analogs. The new octapeptide analogs are useful tools for  
 delineating the various classes of SRIF receptors as well as being of  
 therapeutic value.

IT **38916-34-6D, Somatostatin** (sheep), octapeptide analogs  
**121715-54-6**  
 RL: PROC (Process)  
 (receptor binding of, in adrenal cortex and anterior pituitary and  
 brain and pancreas, mol. structure in relation to)

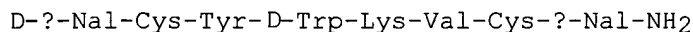
L87 ANSWER 44 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1989:232105 HCAPLUS  
 DOCUMENT NUMBER: 110:232105  
 TITLE: Preparation of therapeutic **somatostatin**  
 analogues  
 INVENTOR(S): Coy, David H.; Murphy, William A.; Heiman, Mark L.  
 PATENT ASSIGNEE(S): Tulane Educational Fund, Inc., USA  
 SOURCE: Eur. Pat. Appl., 8 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 11  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 298732	A2	19890111	EP 1988-306188	19880707 <--
EP 298732	A3	19900606		
EP 298732	B1	19930901		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 4853371	A	19890801	US 1988-209883	19880622 <--
JP 01070500	A2	19890315	JP 1988-167624	19880705 <--
JP 2809403	B2	19981008		
CA 1338302	A1	19960430	CA 1988-571257	19880706 <--
AT 93866	E	19930915	AT 1988-306188	19880707 <--
ES 2058290	T3	19941101	ES 1988-306188	19880707 <--
US 4904642	A	19900227	US 1989-312138	19890217 <--
EP 414475	A1	19910227	EP 1990-309120	19900821 <--
EP 414475	B1	19971210		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AT 161041	E	19971215	AT 1990-309120	19900821 <--
ES 2110411	T3	19980216	ES 1990-309120	19900821 <--
CA 2064705	AA	19910226	CA 1990-2064705	19900822 <--
WO 9102820	A1	19910307	WO 1990-US4766	19900822 <--
W: AU, CA, JP				
AU 9063449	A1	19910403	AU 1990-63449	19900822 <--
AU 655156	B2	19941208		
JP 05502156	T2	19930422	JP 1990-512531	19900822 <--
WO 9115771	A1	19911017	WO 1991-US2225	19910329 <--
W: AU, BB, BG, BR, CA, FI, GB, HU, JP, KP, KR, LK, MC, MG, MW, NO, PL, RO, SD, SU				
RW: BF, BJ, CF, CG, CM, GA, ML, MR, SN, TD, TG				
AU 9176510	A1	19911030	AU 1991-76510	19910329 <--
AU 639560	B2	19930729		
GB 2257784	A1	19930120	GB 1992-20480	19910329 <--
BR 9106309	A	19930420	BR 1991-6309	19910329 <--
HU 62706	A2	19930528	HU 1992-3146	19910329 <--
JP 05508219	T2	19931118	JP 1991-507636	19910329 <--
JP 2733138	B2	19980330		
PL 172133	B1	19970829	PL 1991-296329	19910329 <--
EP 450931	A1	19911009	EP 1991-302910	19910403 <--
EP 450931	B1	19960612		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
EP 693687	A1	19960124	EP 1995-114016	19910403 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AT 139343	E	19960615	AT 1991-302910	19910403 <--
ES 2088465	T3	19960816	ES 1991-302910	19910403 <--
NO 9203839	A	19921119	NO 1992-3839	19921001 <--
LV 10344	B	19960220	LV 1993-4381	19930531 <--
LT 3808	B	19960325	LT 1993-1747	19931230 <--
US 5712087	A	19980127	US 1995-440519	19950512 <--
PRIORITY APPLN. INFO.:				
			US 1987-70400	19870707
			US 1985-775488	19850912
			US 1986-875266	19860617
			US 1987-10349	19870203
			US 1988-209883	19880622
			EP 1988-306188	19880707
			US 1989-398667	19890825
			US 1990-504352	19900404
			WO 1990-US4766	19900822
			WO 1991-US2225	19910329
			EP 1991-302910	19910403
			US 1992-910760	19920707
OTHER SOURCE(S):				
GI				
MARPAT 110:232105				



I



II

AB Peptides contg. the sequence (I; X = amino acid residue), useful for inhibition of secretion of growth hormone, insulin, and glucagon, for treatment of cancer, acromegaly, ulcer, pancreatitis, diarrhea, diabetes, cirrhosis, Alzheimer's disease, mushroom poisoning, and as analgesics (no data), were prepd. Peptide II [.beta.-Nal = 3-(2-naphthalenyl)alanyl] was prepd. by the solid phase method on benzhydrylamine resin.

IT **9002-72-6**, Growth hormone

RL: RCT (Reactant); RACT (Reactant or reagent)  
(inhibition of secretion of, using octapeptides)

IT **120796-15-8P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and cyclization of, in prepn. of growth hormone secretion inhibitor)

IT **111857-95-5P 111857-96-6P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as growth hormone secretion inhibitor)

IT **120796-13-6DP**, benzhydrylamine resin bound

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as intermediate for growth hormone secretion inhibitor)

L87 ANSWER 45 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1988:132324 HCAPLUS

DOCUMENT NUMBER: 108:132324

TITLE: Preparation of **somatostatin** analogs as drugs

INVENTOR(S): Coy, David H.; Murphy, William A.; Heiman, Mark L.

PATENT ASSIGNEE(S): Tulane Educational Fund, Inc., USA

SOURCE: Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 11

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 214872	A2	19870318	EP 1986-307044	19860912 <--
EP 214872	A3	19890906		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
AU 8662076	A1	19870319	AU 1986-62076	19860829 <--
AU 602657	B2	19901025		
FI 8603680	A	19870313	FI 1986-3680	19860911 <--
FI 89062	B	19930430		
FI 89062	C	19930810		
DK 8604351	A	19870313	DK 1986-4351	19860911 <--
DK 172212	B1	19980105		
NO 8603638	A	19870313	NO 1986-3638	19860911 <--
NO 174809	B	19940405		
NO 174809	C	19940713		
ES 2003739	A6	19881116	ES 1986-1814	19860911 <--
CA 1338301	A1	19960430	CA 1986-517969	19860911 <--
JP 62116594	A2	19870528	JP 1986-215581	19860912 <--
JP 2563278	B2	19961211		

US 4853371	A	19890801	US 1988-209883	19880622 <--
US 4904642	A	19900227	US 1989-312138	19890217 <--
EP 414475	A1	19910227	EP 1990-309120	19900821 <--
EP 414475	B1	19971210		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AT 161041	E	19971215	AT 1990-309120	19900821 <--
ES 2110411	T3	19980216	ES 1990-309120	19900821 <--
CA 2064705	AA	19910226	CA 1990-2064705	19900822 <--
WO 9102820	A1	19910307	WO 1990-US4766	19900822 <--
W: AU, CA, JP				
AU 9063449	A1	19910403	AU 1990-63449	19900822 <--
AU 655156	B2	19941208		
JP 05502156	T2	19930422	JP 1990-512531	19900822 <--
WO 9115771	A1	19911017	WO 1991-US2225	19910329 <--
W: AU, BB, BG, BR, CA, FI, GB, HU, JP, KP, KR, LK, MC, MG, MW, NO, PL, RO, SD, SU				
RW: BF, BJ, CF, CG, CM, GA, ML, MR, SN, TD, TG				
AU 9176510	A1	19911030	AU 1991-76510	19910329 <--
AU 639560	B2	19930729		
GB 2257784	A1	19930120	GB 1992-20480	19910329 <--
BR 9106309	A	19930420	BR 1991-6309	19910329 <--
HU 62706	A2	19930528	HU 1992-3146	19910329 <--
JP 05508219	T2	19931118	JP 1991-507636	19910329 <--
JP 2733138	B2	19980330		
PL 172133	B1	19970829	PL 1991-296329	19910329 <--
EP 450931	A1	19911009	EP 1991-302910	19910403 <--
EP 450931	B1	19960612		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
EP 693687	A1	19960124	EP 1995-114016	19910403 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AT 139343	E	19960615	AT 1991-302910	19910403 <--
ES 2088465	T3	19960816	ES 1991-302910	19910403 <--
NO 9203839	A	19921119	NO 1992-3839	19921001 <--
LV 10344	B	19960220	LV 1993-4381	19930531 <--
LT 3808	B	19960325	LT 1993-1747	19931230 <--
US 5712087	A	19980127	US 1995-440519	19950512 <--
PRIORITY APPLN. INFO.:			US 1985-775488	19850912
			US 1986-875266	19860617
			US 1987-10349	19870203
			US 1987-70400	19870707
			US 1988-209883	19880622
			US 1989-398667	19890825
			US 1990-504352	19900404
			WO 1990-US4766	19900822
			WO 1991-US2225	19910329
			EP 1991-302910	19910403
			US 1992-910760	19920707

GI

$$A1A2NCHA^3CO-Cys-A^4-D-Trp-Lys-A^5-Cys-A^7-NH_2 \quad I$$

AB The title compds. [I; A1, A2 = H, alkyl, phenylalkyl, acyl, alkoxy carbonyl; A3 = CHA6 (A6 = pentafluorophenyl, naphthyl, pyridyl, phenyl); A4 = o-, m-, or p-substituted X-Phe (X = H, halo, NO<sub>2</sub>, OH, NH<sub>2</sub>, alkyl), pentafluoro-Phe, .beta.-naphthylalanyl (.beta.-Nal); A5 = Thr, Ser, Phe, Val, .alpha.-aminoisobutyric acid residue, Ile; A7 = Thr, Trp, .beta.-Nal], **somatostatin** analogs, and their pharmaceutically acceptable salts are prep'd. via the solid-phase method. H-D-.beta.-Nal-Cys-Tyr-D-Trp-Lys-Val-Cys-Thr-NH<sub>2</sub> was prep'd. by peptide coupling of the appropriate protected amino acids on a benzhydrylamine

resin, followed by deprotection and resin cleavage using HF/anisole.

IT 113294-87-4P 113294-88-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, for redn. of growth hormone, insulin, glucagon, or  
pancreatic exocrine secretion)

IT 51110-01-1DP, Somatostatin, analogs

RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
(solid-phase synthesis of, for redn. of growth hormone, insulin,  
glucagon, or pancreatic exocrine secretion)

L87 ANSWER 46 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1988:714 HCAPLUS

DOCUMENT NUMBER: 108:714

TITLE: .mu.-Opiate binding and morphine antagonism by  
octapeptide analogs of **somatostatin**

AUTHOR(S): Walker, J. Michael; Bowen, Wayne D.; Atkins, Steven  
T.; Hemstreet, Mitzi K.; Coy, David H.

CORPORATE SOURCE: Dep. Psychol., Brown Univ., Providence, RI, 02912, USA

SOURCE: Peptides (New York, NY, United States) (1987  
, 8(5), 869-75

CODEN: PPTDD5; ISSN: 0196-9781

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A series of cyclic conformationally restrained octapeptide analogs of  
**somatostatin** were examd. for their ability to inhibit the binding  
of tritiated .mu., .kappa., and .delta. opiate receptor ligands. Several  
of these substances were found to have high affinity for .mu. opiate  
receptors while having very low affinity for both .kappa. and .delta.  
receptors. Previous suggestions that **somatostatin** analogs  
exhibit opiate antagonist activity led to a study of the ability of the 2  
most potent compds. to inhibit morphine analgesia in rats after  
intracerebroventricular injection. One of the compds. significantly  
antagonized morphine analgesia, although the other displayed severe  
toxicity. These 2 compds. differed in that the very toxic compd. had  
previously been found to possess significant **somatostatin**  
activity. Thus, the structural requirements for toxicity and  
**somatostatin** activity can be differentiated from those of opiate  
activity.

IT 51110-01-1D, Somatostatin, analogs 111857-95-5

, DC-13-212 111857-96-6, DC-13-217

RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
study, unclassified); PRP (Properties); BIOL (Biological study)  
(opiate activity of, structure in relation to)

L87 ANSWER 47 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1986:472825 HCAPLUS

DOCUMENT NUMBER: 105:72825

TITLE: Synthesis and biological activity of highly potent  
octapeptide analogs of **somatostatin**

AUTHOR(S): Cai, R. Z.; Szoke, B.; Lu, R.; Fu, D.; Redding, T. W.;  
Schally, A. V.

CORPORATE SOURCE: Sch. Med., Tulane Univ., New Orleans, LA, 70146, USA

SOURCE: Proceedings of the National Academy of Sciences of the  
United States of America (1986), 83(6),  
1896-900

CODEN: PNASA6; ISSN: 0027-8424

DOCUMENT TYPE: Journal

LANGUAGE: English

AB In the search for selective and long-acting analogs of  
**somatostatin**, nearly 200 compds. were synthesized by solid-phase  
methods, purified, and tested biol. Among these octapeptides, some  
contained N-terminal D-Phe, Ac-D-Phe, or AcPhe followed by hexapeptide  
sequences Cys-Phe-D-Trp-Lys-Thr-Cys or Cys-Tyr-D-Trp-Lys-Val-Cys and

Thr-NH<sub>2</sub> or Trp-NH<sub>2</sub> as C-terminal residues. (Cyclo 2-7)-D-Phe-Cys-Trp-D-Trp-Lys-Val-Cys-Thr-NH<sub>2</sub> (I) [99660-13-6] and (cyclo 2-7)-D-Phe-Cys-Tyr-D-Trp-Lys-Val-Cys-Trp-NH<sub>2</sub> (II) [103222-11-3] were 177 times and 113 times more potent, resp., than **somatostatin** in tests for inhibition of growth hormone [9002-72-6] release. These 2 octapeptides contg. tyrosine and valine in positions 3 and 6, resp., were more active and more selective than their Ph-3 and Thr-6 counterparts, (cyclo 2-7)-D-Phe-Cys-Phe-D-Trp-Lys-thr-Cys-Thr-NH<sub>2</sub> [99685-66-2] and (cyclo 2-7)-D-Phe-Cys-Phe-D-Trp-Lys-Thr-Cys-Trp-NH<sub>2</sub> [103222-10-2]. I was also .apprx.6 times more potent than its L-Trp-4 diastereoisomer [103222-07-7]. The analogs I, and II showed a prolonged duration of action and inhibited growth hormone release for at least 3 h. Analogs of both Phe-3/Thr-6 and Tyr-3/Val-6 classes also suppressed the release of insulin [9004-10-8] and glucagon [9007-92-5] in rats and pentagastrin-induced secretion of gastric acid in dogs, but their potencies in these tests were much smaller than the growth-hormone-release inhibitory activity. Some of these analogs possessed antitumor activities as shown by the inhibition of growth of animal models of prostate, mammary, and ductal pancreatic tumors.

IT 51110-01-1D, analogs

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)  
(biol. activity, mol. structure in relation to)

IT 51110-01-1 103222-00-0 103548-91-0

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)  
(growth hormone secretion inhibition by, mol. structure in relation to)

IT 9002-72-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)  
(**somatostatin** analog inhibition of release of, mol. structure in relation to)

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E407 THROUGH E602 ASSIGNED

=> fil reg

FILE 'REGISTRY' ENTERED AT 12:01:44 ON 22 JUL 2003  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
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STRUCTURE FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7  
DICTIONARY FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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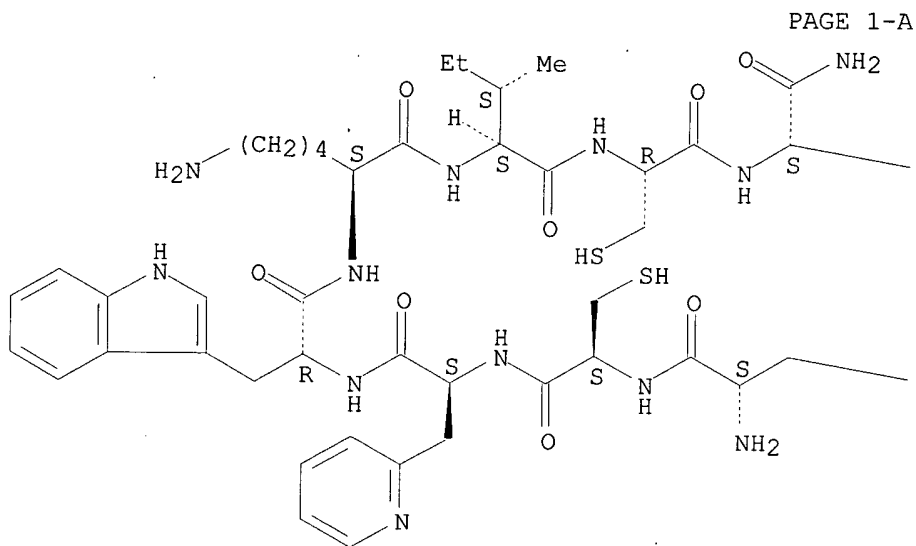
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L89 ANSWER 1 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN **243470-90-8** REGISTRY  
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 (9CI) (CA INDEX NAME)  
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 LC STN Files: CA, CAPLUS

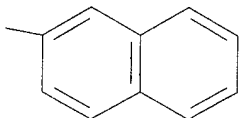
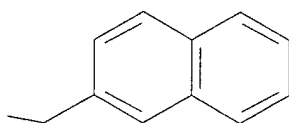
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Absolute stereochemistry.





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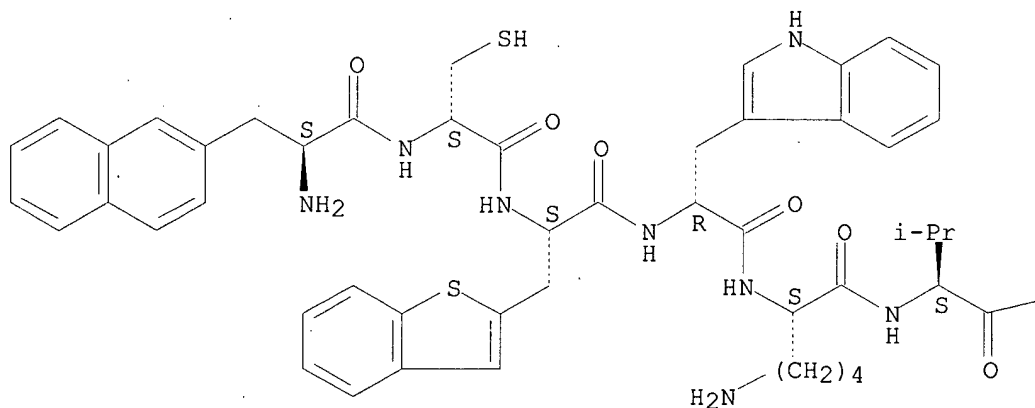
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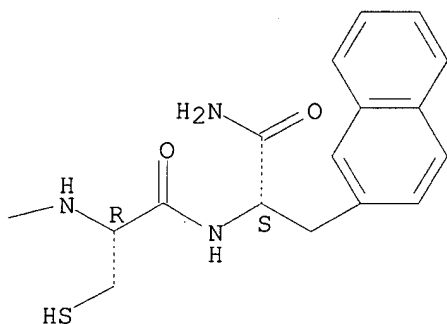
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RN **243470-81-7** REGISTRY  
CN L-Alaninamide, 3-(2-naphthalenyl)-L-alanyl-D-cysteiny-3-benzo[b]thien-2-yl-L-alanyl-D-tryptophyl-L-lysyl-L-valyl-L-cysteiny-3-(2-naphthalenyl)-(9CI) (CA INDEX NAME)  
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MF C65 H75 N11 O8 S3  
SR CA  
LC STN Files: CA, CAPLUS

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

Absolute stereochemistry.

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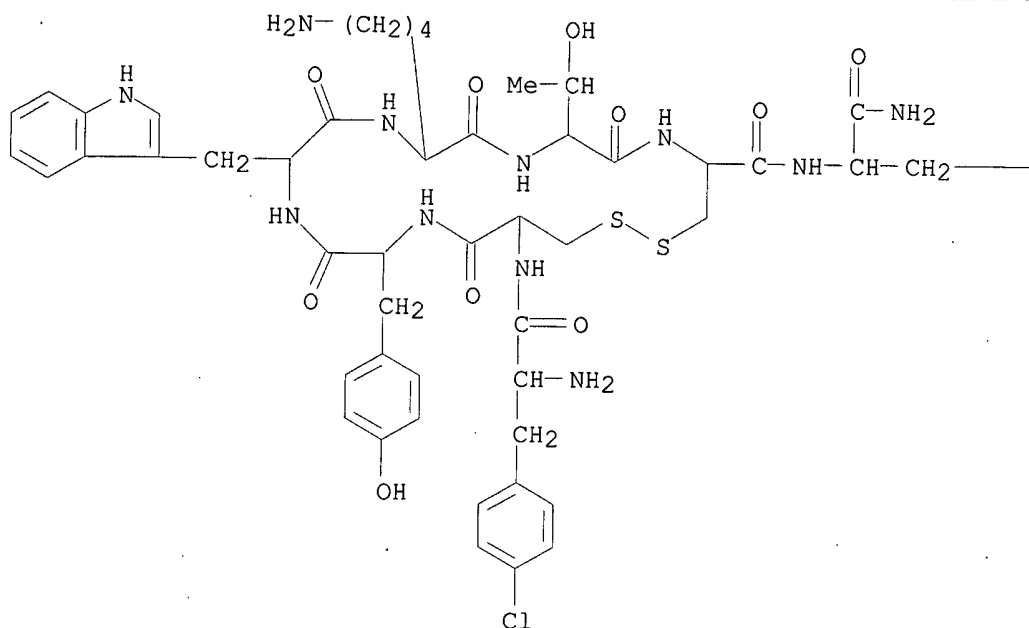
L89 ANSWER 20 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN  
RN **230646-30-7** REGISTRY  
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OTHER NAMES:

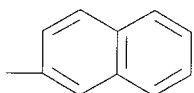
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LC STN Files: CA, CAPLUS

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

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2 REFERENCES IN FILE CA (1947 TO DATE)  
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REFERENCE 1: 137:211269

REFERENCE 2: 131:124917

L89 ANSWER 30 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN **209006-90-6** REGISTRY

CN L-Alaninamide, 4-nitro-L-phenylalanyl-D-cysteinyl-L-tyrosyl-D-tryptophyl-L-lysyl-(2S)-2-aminobutanoyl-L-cysteinyl-3-(2-naphthalenyl)-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

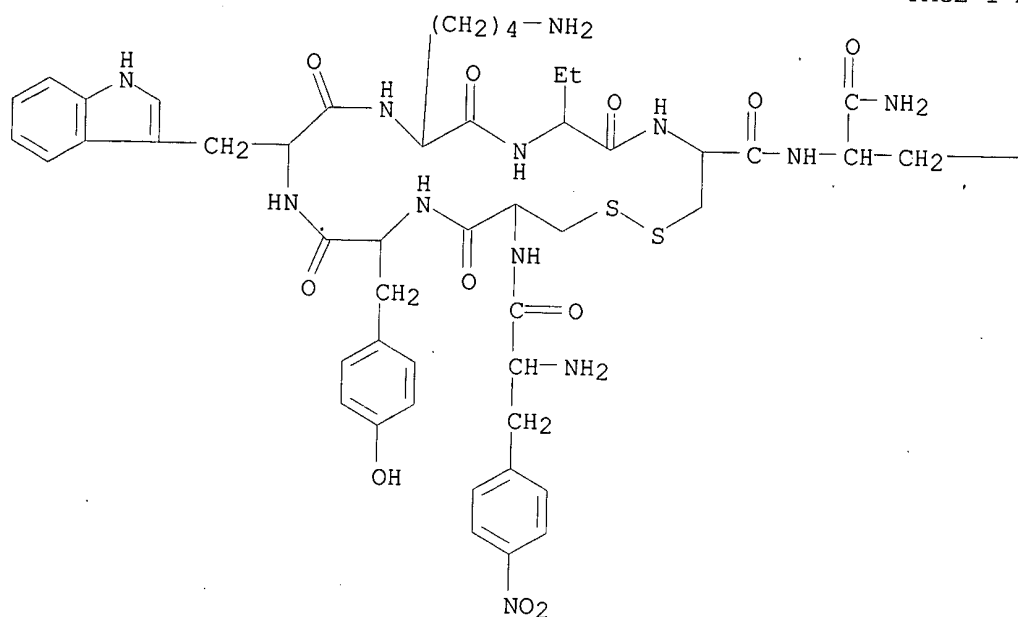
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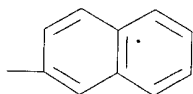
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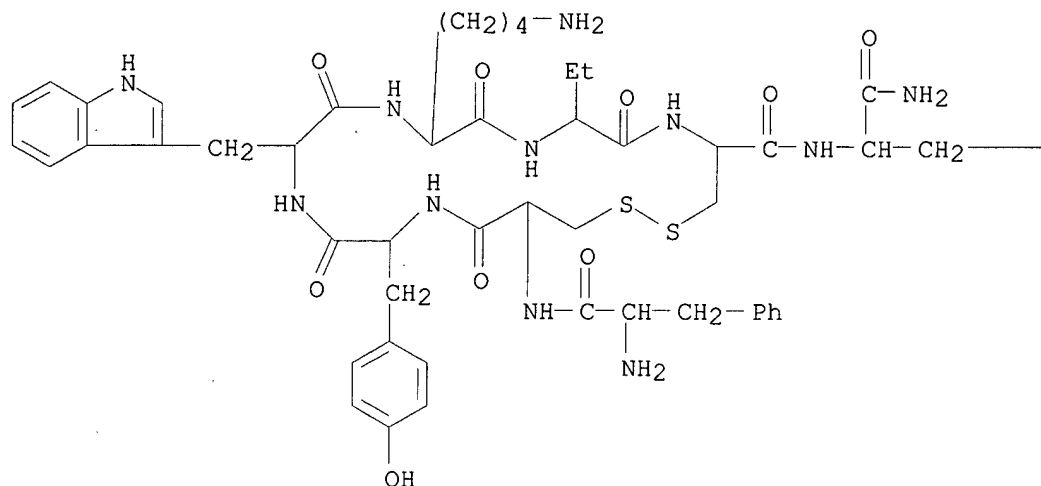
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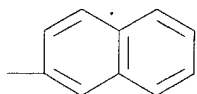
L89 ANSWER 40 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN **209006-77-9** REGISTRY  
 CN L-Alaninamide, L-phenylalanyl-D-cysteinyl-L-tyrosyl-D-tryptophyl-L-lysyl-  
 (2S)-2-aminobutanoyl-L-cysteinyl-3-(2-naphthalenyl)-, cyclic  
 (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 MF C58 H69 N11 O9 S2  
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 LC STN Files: CA, CAPLUS, USPATFULL

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

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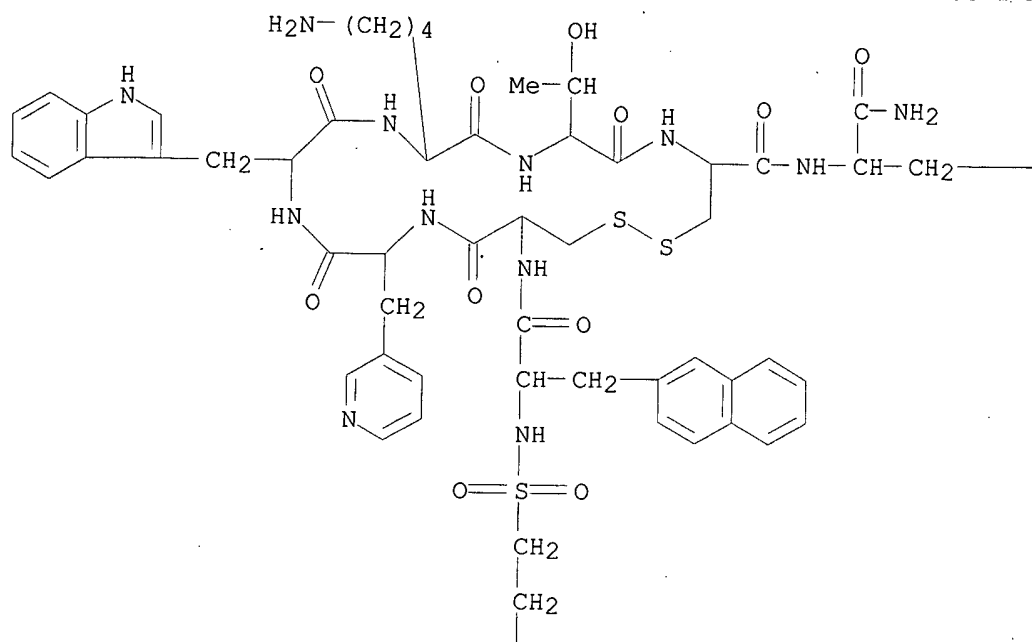
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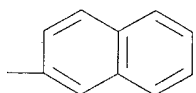
L89 ANSWER 50 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN **209006-50-8** REGISTRY  
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\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

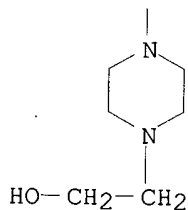
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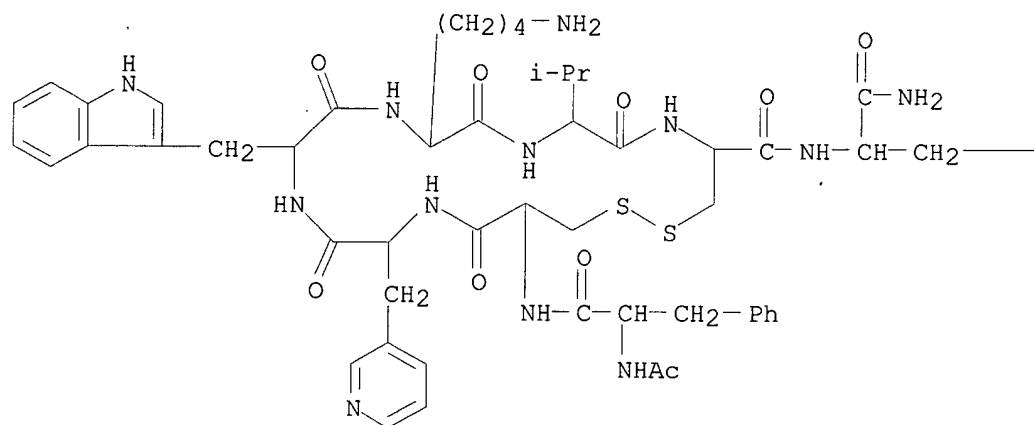
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L89 ANSWER 60 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN **209006-36-0** REGISTRY  
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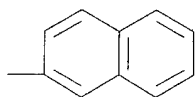
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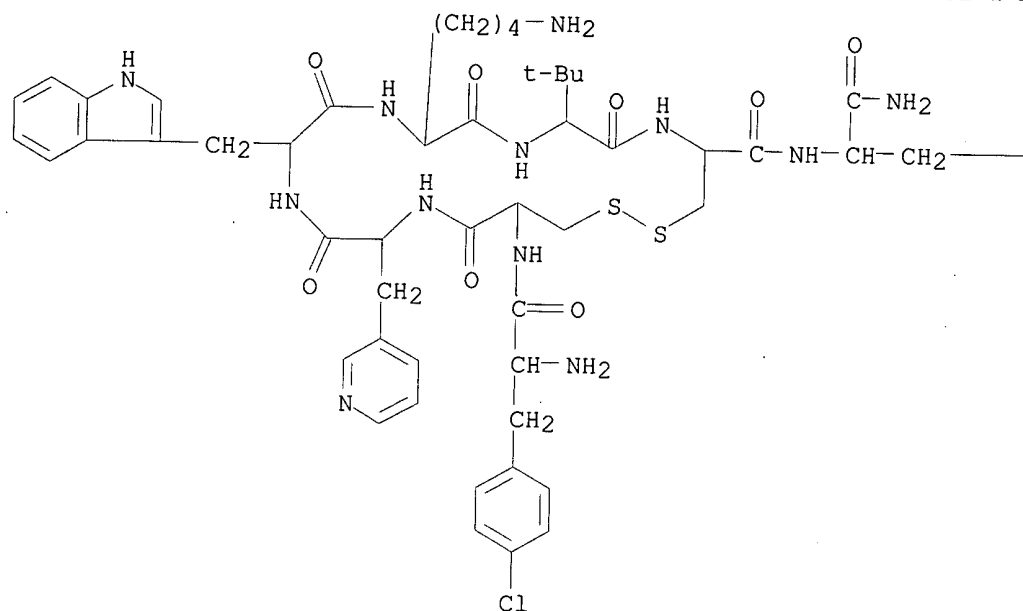
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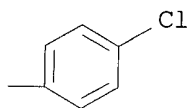
L89 ANSWER 70 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN  
RN **209006-19-9** REGISTRY  
CN L-Phenylalaninamide, 4-chloro-L-phenylalanyl-D-cysteiny-3-(3-pyridinyl)-L-alanyl-D-tryptophyl-L-lysyl-3-methyl-L-valyl-L-cysteiny-4-chloro-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)  
FS PROTEIN SEQUENCE; STEREOSEARCH  
MF C55 H68 Cl2 N12 O8 S2  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

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REFERENCE 1: 131:124917

REFERENCE 2: 129:68033

L89 ANSWER 80 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN 209006-08-6 REGISTRY

CN L-Alaninamide, 3-(2-naphthalenyl)-L-alanyl-D-cysteiny-3-iodo-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl-L-cysteiny-3-(2-naphthalenyl)-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

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MF C63 H72 I N11 O9 S2

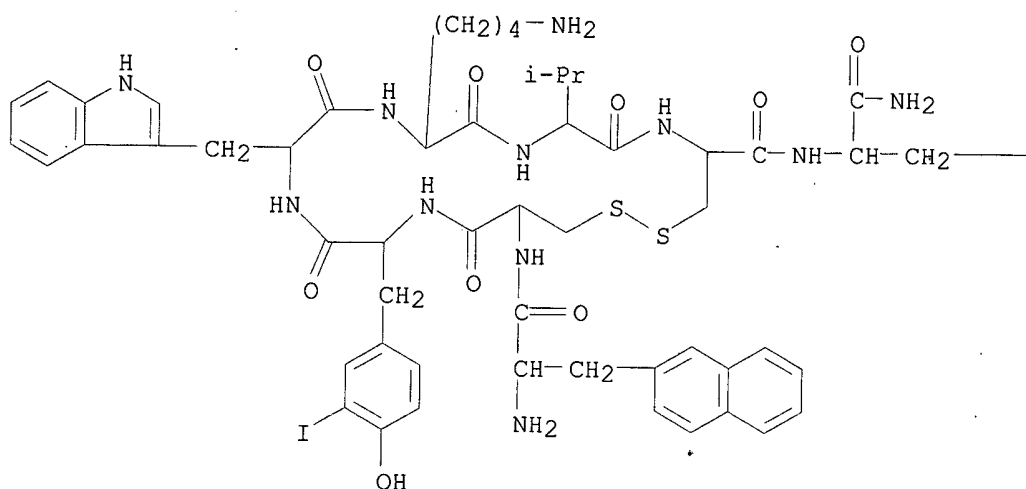
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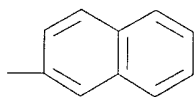
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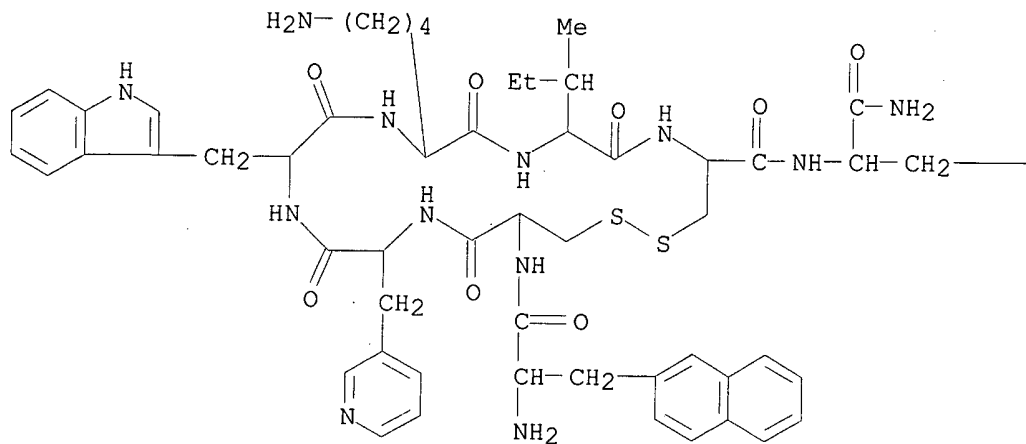
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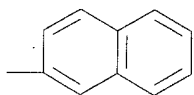
L89 ANSWER 90 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN  
RN **209005-93-6** REGISTRY  
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FS PROTEIN SEQUENCE; STEREOSEARCH  
MF C63 H74 N12 O8 S2  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

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REFERENCE 1: 131:124917

REFERENCE 2: 129:68033

L89 ANSWER 100 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN 209005-82-3 REGISTRY

CN L-Phenylalaninamide, 4-fluoro-L-phenylalanyl-D-cysteinyl-3-(3-pyridinyl)-L-alanyl-D-tryptophyl-L-lysyl-L-valyl-L-cysteinyl-4-fluoro-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

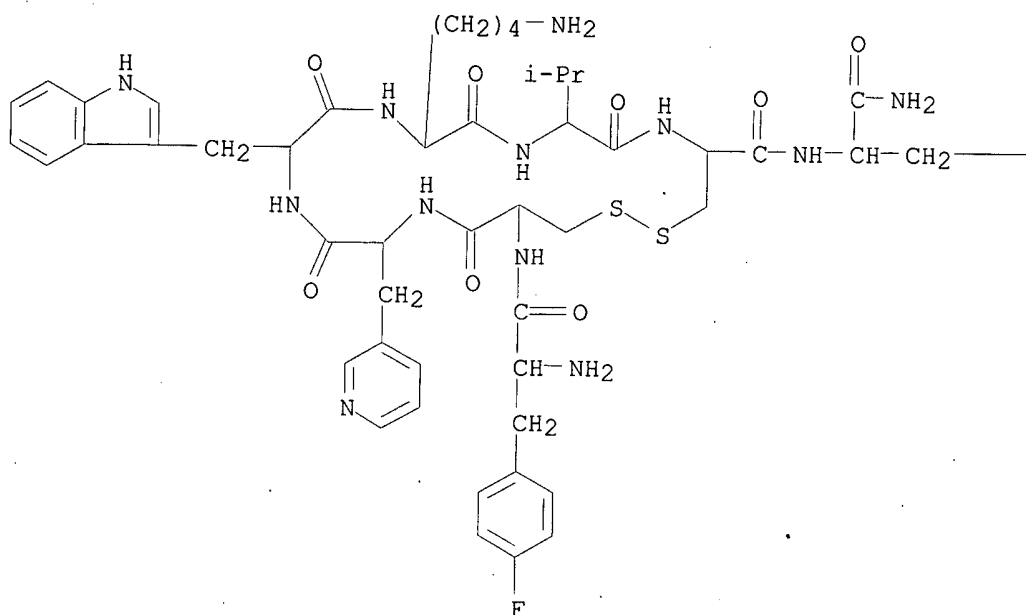
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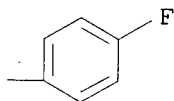
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\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

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REFERENCE 1: 131:124917

REFERENCE 2: 129:68033

L89 ANSWER 110 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN **205234-67-9** REGISTRY

CN L-Alaninamide, L-phenylalanyl-D-cysteinyl-3-(3-pyridinyl)-L-alanyl-D-tryptophyl-L-lysyl-L-valyl-L-cysteinyl-3-(2-naphthalenyl)-; cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN DC-38-51

FS PROTEIN SEQUENCE; STEREOSEARCH

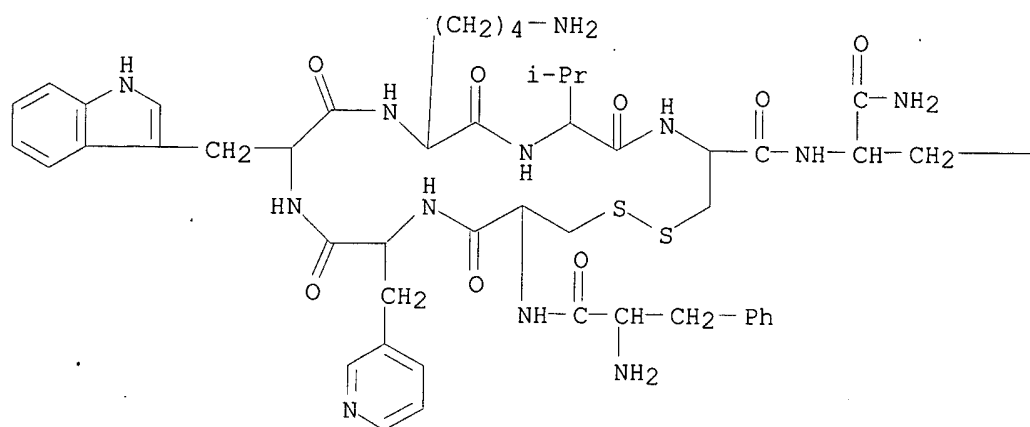
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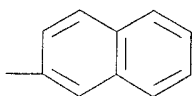
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L89 ANSWER 120 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN **195520-42-4** REGISTRY

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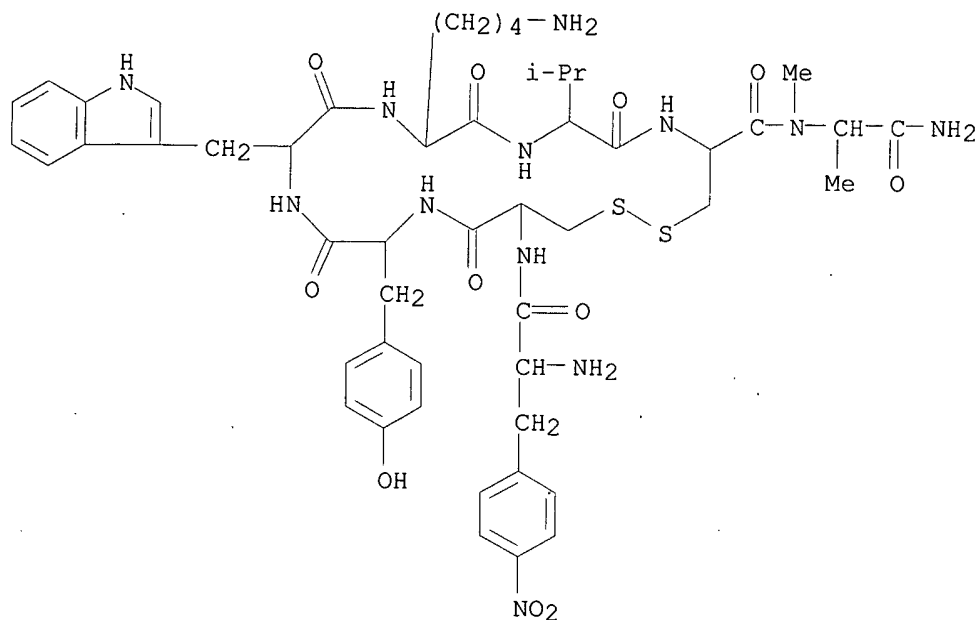
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LC STN Files: CA, CAPLUS, USPATFULL

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*



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REFERENCE 1: 130:47494

REFERENCE 2: 127:248422

L89 ANSWER 130 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN **182482-16-2** REGISTRY

CN L-Alaninamide, D-phenylalanyl-L-cysteinyl-O-(1,1-dimethylethyl)-L-tyrosyl-D-tryptophyl-N6-[(1,1-dimethylethoxy)carbonyl]-L-lysyl-O-(1,1-dimethylethyl)-L-threonyl-L-cysteinyl-3-(2-naphthalenyl)-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

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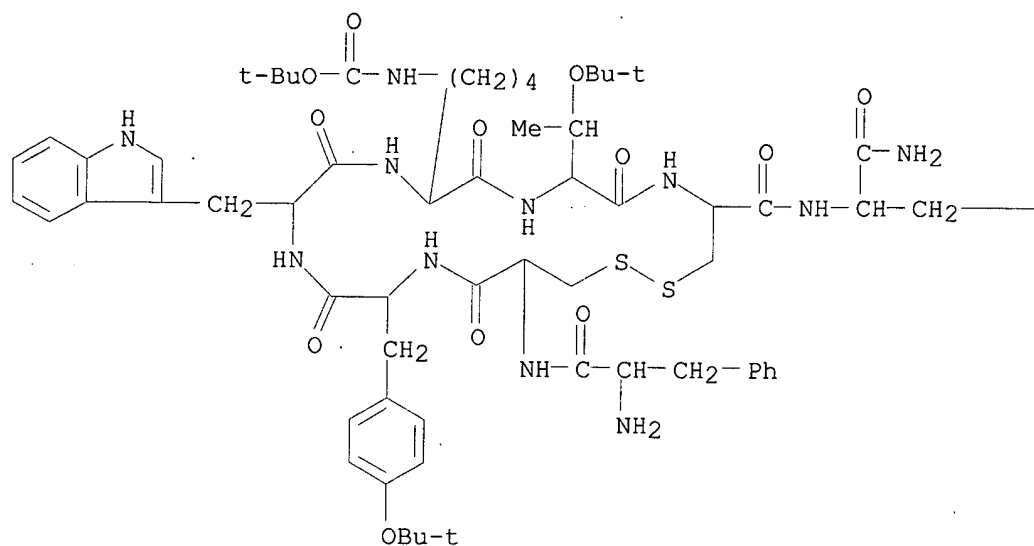
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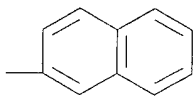
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L89 ANSWER 140 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN **163687-44-3** REGISTRY

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 (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

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 (2.fwdarw.7)-disulfide

OTHER NAMES:

CN 46: PN: US20020042374 PAGE: 10 claimed protein

CN 50: PN: US6268342 SEQID: 55 claimed protein

CN NC 8-12

CN PRL 2486

FS PROTEIN SEQUENCE; STEREOSEARCH

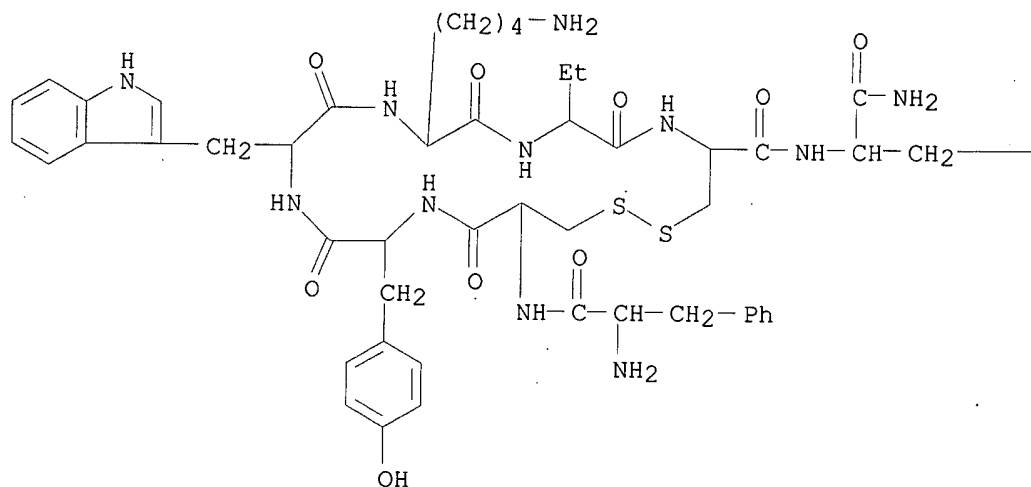
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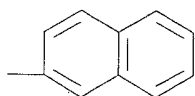
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

PAGE 1-A



PAGE 1-B



14 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 14 REFERENCES IN FILE CAPLUS (1947 TO DATE)

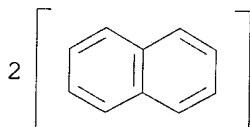
REFERENCE 1: 139:30439  
 REFERENCE 2: 137:346570  
 REFERENCE 3: 137:295256  
 REFERENCE 4: 136:304089  
 REFERENCE 5: 135:132468  
 REFERENCE 6: 134:13526  
 REFERENCE 7: 130:20992  
 REFERENCE 8: 130:20991  
 REFERENCE 9: 128:239911  
 REFERENCE 10: 127:229846

L89 ANSWER 150 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 154897-02-6 REGISTRY

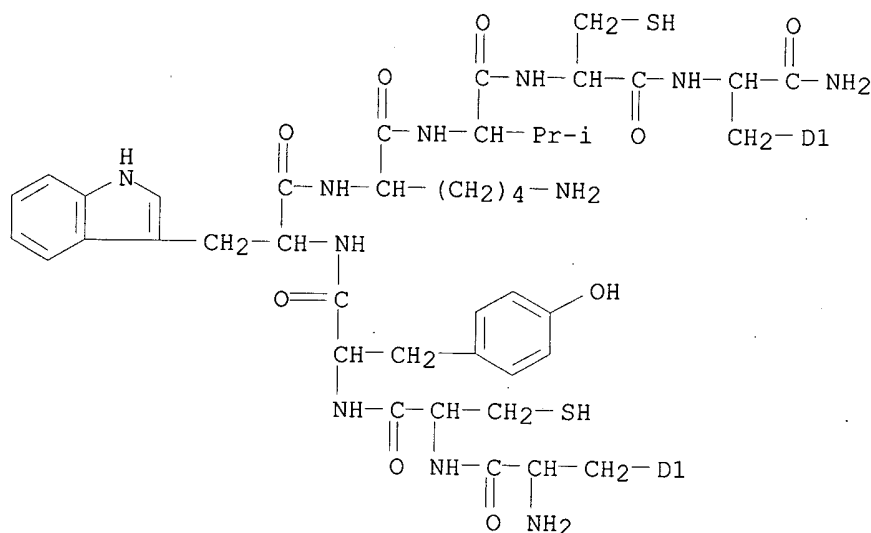
CN D-Alaninamide, 3-(naphthalenyl)-L-alanyl-L-cysteiny-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl-L-cysteiny-3-(naphthalenyl)- (9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE  
 MF C63 H75 N11 O9 S2  
 CI IDS  
 SR CA  
 LC STN Files: CA, CAPLUS

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

PAGE 1-A



PAGE 2-A



1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 120:290830

L89 ANSWER 160 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN **152045-40-4** REGISTRY

CN D-Alaninamide, 3-(2-naphthalenyl)-D-alanyl-L-cysteiny-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl-L-cysteiny-3-(2-naphthalenyl)-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2-Dithia-5,8,11,14,17-pentaazacycloeicosane, cyclic peptide deriv.

OTHER NAMES:

CN D-Nal-cyclo-(Cys-Tyr-D-Trp-Lys-Val-Cys)-D-Nal-NH2

FS PROTEIN SEQUENCE; STEREOSEARCH

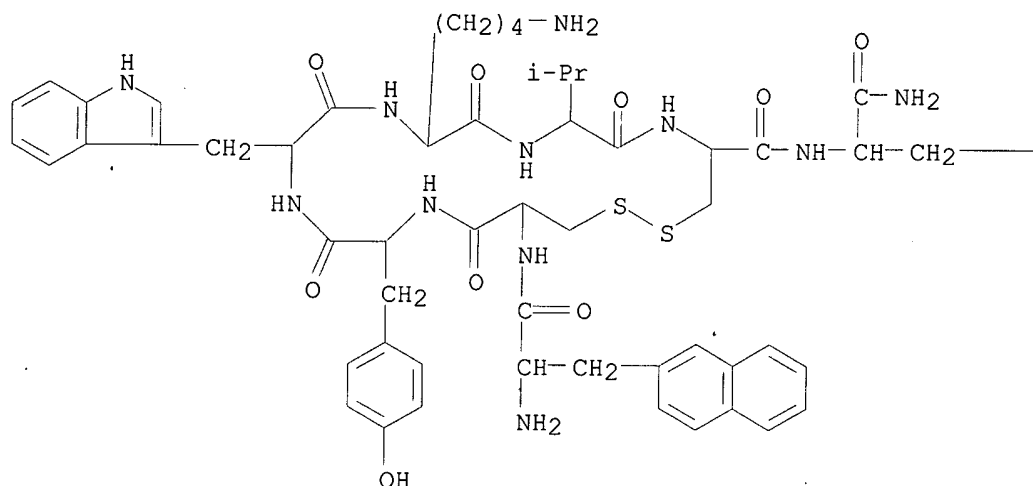
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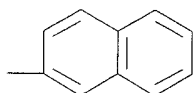
SR CA  
 LC STN Files: CA, CAPLUS, CHEMCATS, TOXCENTER, USPATFULL

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

PAGE 1-A



PAGE 1-B



3 REFERENCES IN FILE CA (1947 TO DATE)  
 3 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 131:295567

REFERENCE 2: 124:46620

REFERENCE 3: 120:46123

L89 ANSWER 170 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN **138248-90-5** REGISTRY

CN Alaninamide, D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-valyl-L-cysteinyl-3-(2-naphthalenyl)-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2-Dithia-5,8,11,14,17-pentaazacycloeicosane, cyclic peptide deriv.

CN DL-Alaninamide, D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-valyl-L-cysteinyl-3-(2-naphthalenyl)-, cyclic (2.fwdarw.7)-disulfide

FS PROTEIN SEQUENCE; STEREOSEARCH

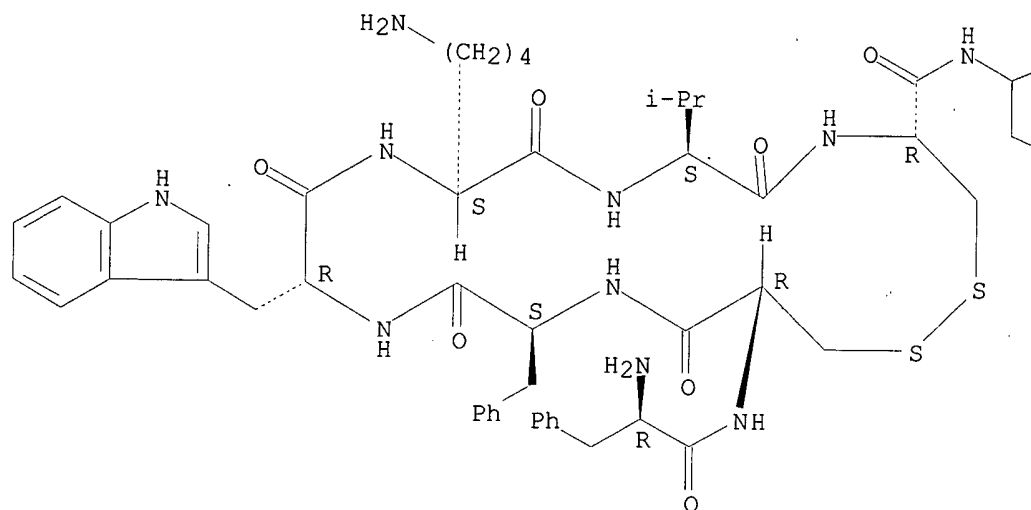
MF C59 H71 N11 O8 S2

SR CA

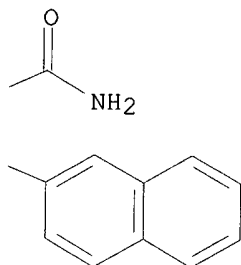
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 116:52344

L89 ANSWER 180 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN **111857-96-6** REGISTRY

CN L-Alaninamide, 3-(2-naphthalenyl)-D-alanyl-L-cysteiny-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl-L-cysteiny-3-(2-naphthalenyl)-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2-Dithia-5,8,11,14,17-pentaazacycloeicosane, cyclic peptide deriv.

OTHER NAMES:

CN 49: PN: US20020042374 PAGE: 10 claimed protein

CN 53: PN: US6268342 SEQID: 58 claimed protein

CN BIM 23042

CN D-Nal-cyclo(Cys-Tyr-D-Trp-Lys-Val-Cys)-Nal-NH2

CN DC-13-217

FS PROTEIN SEQUENCE; STEREOSEARCH

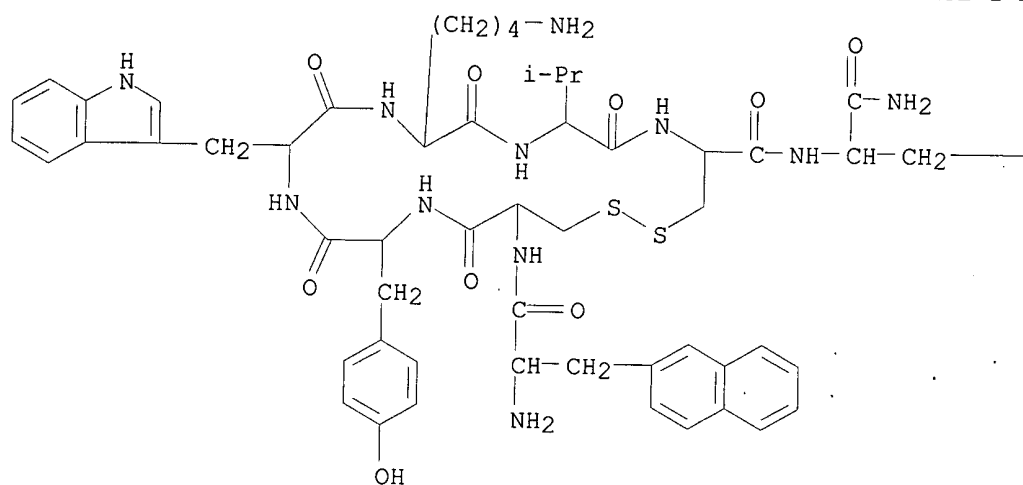
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SR CA

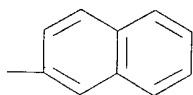
LC STN Files: BIOSIS, CA, CAPLUS, TOXCENTER, USPATFULL

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

PAGE 1-A



PAGE 1-B



19 REFERENCES IN FILE CA (1947 TO DATE)  
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 19 REFERENCES IN FILE CAPLUS (1947 TO DATE)

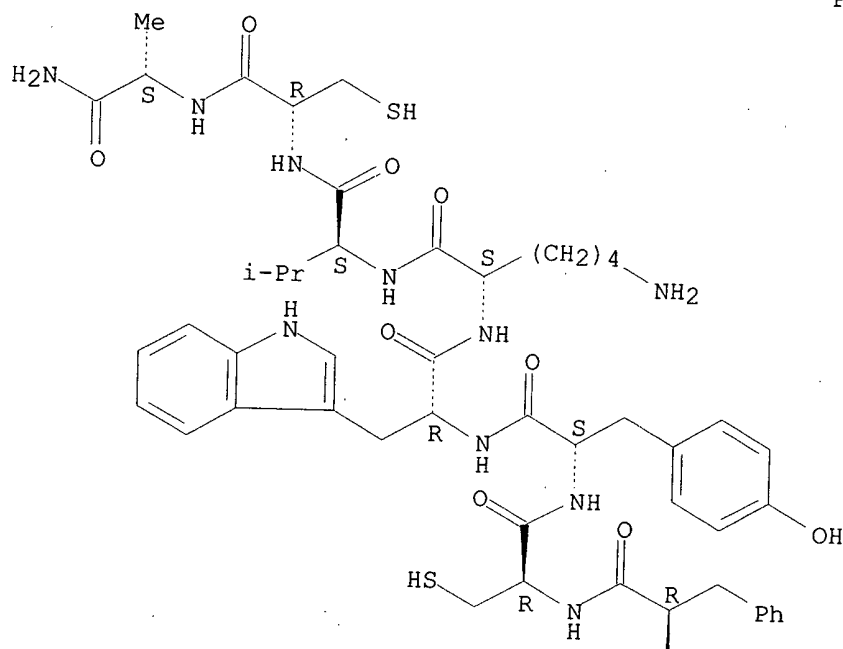
REFERENCE 1: 137:295256  
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 REFERENCE 4: 135:132468  
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 REFERENCE 6: 130:20992  
 REFERENCE 7: 130:20991  
 REFERENCE 8: 129:23568  
 REFERENCE 9: 128:239911  
 REFERENCE 10: 128:110989

L89 ANSWER 183 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 103222-00-0 REGISTRY  
 CN L-Alaninamide, D-phenylalanyl-L-cysteinyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-  
 valyl-L-cysteinyl- (9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 MF C49 H67 N11 O9 S2  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



2 REFERENCES IN FILE CA (1947 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 111:50777

REFERENCE 2: 105:72825

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 FILE 'HCAPLUS' ENTERED AT 11:31:06 ON 22 JUL 2003  
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FILE COVERS 1907 - 22 Jul 2003 VOL 139 ISS 4  
 FILE LAST UPDATED: 21 Jul 2003 (20030721/ED)

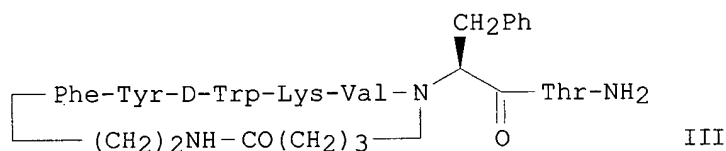
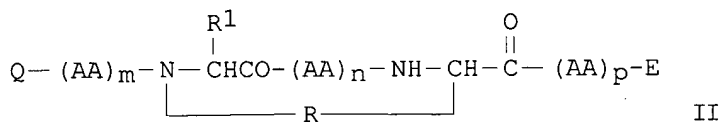
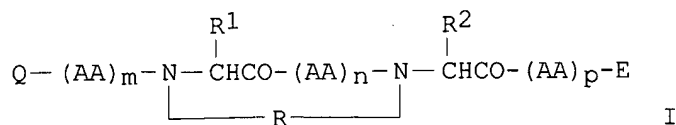
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 L23 5224 SEA FILE=REGISTRY ABB=ON PLU=ON SOMATO?  
 L24 89156 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 OR ?SOMATO?  
 L25 10 SEA FILE=HCAPLUS ABB=ON PLU=ON L22 AND L24  
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 L35 127 SEA FILE=REGISTRY ABB=ON PLU=ON L34 AND (CYCL? OR BRID? OR MULTICHAI?)  
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 L57 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1998:427795 HCAPLUS  
 DOCUMENT NUMBER: 129:95723  
 TITLE: Preparation of conformationally constrained backbone cyclized **somatostatin** analogs and combinatorial libraries  
 INVENTOR(S): Hornik, Vered; Seri-Levy, Alon; Gellerman, Gary; Gilon, Chaim  
 PATENT ASSIGNEE(S): Peptor Ltd., Israel; Yissim Research Development Co.

SOURCE: of Hebrew University of Jerusalem  
 U.S., 35 pp., Cont.-in-part of U.S. Ser. No. 488,159.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 10  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5770687	A	19980623	US 1996-690090	19960731
US 5811392	A	19980922	US 1995-488159	19950607
US 6117974	A	20000912	US 1995-569042	19951207
WO 9804583	A1	19980205	WO 1997-IL261	19970730
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9736331	A1	19980220	AU 1997-36331	19970730
AU 711100	B2	19991007		
EP 920446	A1	19990609	EP 1997-932978	19970730
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CN 1231672	A	19991013	CN 1997-198197	19970730
BR 9710636	A	20000111	BR 1997-10636	19970730
JP 2000516592	T2	20001212	JP 1998-508666	19970730
US 6265375	B1	20010724	US 1998-120237	19980722
KR 2000029654	A	20000525	KR 1999-700727	19990129
US 6407059	B1	20020618	US 2000-580905	20000531
PRIORITY APPLN. INFO.:				
US 1995-488159 A2 19950607				
US 1995-569042 A2 19951207				
IL 1991-99628 A 19911002				
US 1992-955380 B2 19921001				
IL 1994-109943 A 19940608				
US 1995-444135 A2 19950518				
IL 1995-115096 A 19950829				
US 1996-690090 A 19960731				
WO 1997-IL261 W 19970730				
US 1998-120237 A3 19980722				
OTHER SOURCE(S): MARPAT 129:95723				
GI				



AB The novel conformationally constrained backbone cyclized **somatostatin** analogs I and II [m, n, p = independently 0-8; AA = amino acid residue wherein each amino acid residue may be the same or different; Q = H, acyl group; E = OH, carboxyl protective group, amino group, or the terminal carboxy group can be reduced to CH<sub>2</sub>OH; R<sub>1</sub>, R<sub>2</sub> = independently optionally protected amino acid side chain; R = X-M-Y-W-Z, X-M-Z; M, W = independently amide, thioether, thioester, disulfide; X, Y, Z = independently alkylene, substituted alkylene, arylene, homo- or heterocycloarylene, substituted cycloalkylene] and combinatorial libraries thereof are disclosed. Methods for synthesizing the **somatostatin** analogs and for producing the libraries of the **somatostatin** analogs are also disclosed. Furthermore, pharmaceutical compns. comprising **somatostatin** analogs, and methods of using such compns. in the treatment of endocrine disorders, neoplasms and metabolic disorders are also disclosed. Thus, cyclopeptide III (PTR 3046) was prepd. by solid-phase methods on a Rink amide resin using 9-fluorenylmethoxycarbonyl (Fmoc) backbone protection and allyl protection for the cyclic amide residues. PTR 3046 and related cyclopeptides and combinatorial libraries were tested in vitro for binding to a variety of different **somatostatin** receptors in Chinese hamster ovary cells expressing the various receptors.

IT **38916-34-6DP, Somatostatin**, backbone cyclized analogs and combinatorial libraries **203116-99-8P 203117-00-4P 203117-01-5P 203117-02-6P 203117-03-7P 203117-06-0P 203200-47-9P, PTR 3046 209597-02-4P 209597-03-5P 209597-04-6P 209597-05-7P 209597-07-9P 209597-08-0P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of conformationally constrained backbone cyclized **somatostatin** analogs and combinatorial libraries)

REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1998:180781 HCAPLUS

DOCUMENT NUMBER: 128:239911  
 TITLE: Pharmaceutical composition for the treatment of syndrome X of Reaven  
 INVENTOR(S): Cohen, Yarom  
 PATENT ASSIGNEE(S): Cohen, Yarom, Israel  
 SOURCE: PCT Int. Appl., 45 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9810786	A2	19980319	WO 1997-IL301	19970910
WO 9810786	A3	19980827		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG AU 9741339 A1 19980402 AU 1997-41339 19970910 PRIORITY APPLN. INFO.: IL 1996-119250 19960912 IL 1996-119403 19961010 WO 1997-IL301 19970910				

OTHER SOURCE(S): MARPAT 128:239911  
 AB The present invention relates to a pharmaceutical compn. comprising as active ingredient a compd. selected among **somatostatin** or one of its analogs, diazoxide or one of its analogs, cyclothiazide or one of its analogs and metformin, for the treatment of syndrome X of Reaven (also called "hyperinsulinemia syndrome").  
 IT **38916-34-6, Somatostatin 38916-34-6D, Somatostatin, analogs 77909-99-0 204707-70-0 204707-77-7 204995-48-2**  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (hyperinsulinemia treatment with **somatostatin** analogs)

L57 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1998:119596 HCAPLUS  
 DOCUMENT NUMBER: 128:226364  
 TITLE: A Backbone-Cyclic, Receptor 5-Selective **Somatostatin** Analog: Synthesis, Bioactivity, and Nuclear Magnetic Resonance Conformational Analysis  
 AUTHOR(S): Gilon, Chaim; Huenges, Martin; Mathae, Barbara; Gellerman, Gary; Hornik, Vered; Afargan, Michel; Amitay, Oved; Ziv, Ofer; Feller, Etti; Gamliel, Asher; Shohat, Dvira; Wanger, Mazal; Arad, Oded; Kessler, Horst  
 CORPORATE SOURCE: Department of Organic Chemistry, Hebrew University, Jerusalem, Israel  
 SOURCE: Journal of Medicinal Chemistry (1998), 41(6), 919-929  
 CODEN: JMCMAR; ISSN: 0022-2623  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Cyclo(Phen2-Tyr-D-Trp-Lys-Val-PheC3)-Thr-NH2 (PTR 3046), a backbone-cyclic **somatostatin** analog was synthesized by solid-phase methodol. The binding characteristics of PTR 3046 to the different **somatostatin** receptors, expressed in CHO cells, indicate high selectivity to the SSTR5 receptor. PTR 3046 is highly stable against enzymic degrdn. as detd. in



vitro by incubation with rat renal homogenate and human serum. The biol. activity of PTR 3046 in vivo was detd. in rats. PTR 3046 inhibits bombesin- and caerulein-induced amylase and lipase release from the pancreas without inhibiting growth hormone or glucagon release. The major conformation of PTR 3046 in CD3OH, as detd. by NMR, is defined by a type II' .beta.-turn at D-Trp-Lys and a cis amide bond at Val-PheC3.

IT 203200-47-9P, PTR 3046

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and bioactivity and NMR and conformation of a backbone-cyclic, receptor 5-selective **somatostatin** analog)

L57 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:102893 HCAPLUS

DOCUMENT NUMBER: 128:180672

TITLE: Conformationally constrained backbone cyclized **somatostatin** analogs

INVENTOR(S): Hornik, Vered; Seri-Levy, Alon; Gellerman, Gary; Gilon, Chaim

PATENT ASSIGNEE(S): Peptor Ltd., Israel; Yissum Research Development Company of the Hebrew; Hornik, Vered; Seri-Levy, Alon; Gellerman, Gary; Gilon, Chaim

SOURCE: PCT Int. Appl., 97 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 10

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9804583	A1	19980205	WO 1997-IL261	19970730
W:				
AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:				
GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5770687	A	19980623	US 1996-690090	19960731
AU 9736331	A1	19980220	AU 1997-36331	19970730
AU 711100	B2	19991007		
EP 920446	A1	19990609	EP 1997-932978	19970730
R:				
AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9710636	A	20000111	BR 1997-10636	19970730
JP 2000516592	T2	20001212	JP 1998-508666	19970730
PRIORITY APPLN. INFO.:			US 1996-690090	A 19960731
			US 1995-488159	A2 19950607
			US 1995-569042	A2 19951207
			WO 1997-IL261	W 19970730

OTHER SOURCE(S): MARPAT 128:180672

AB Methods for synthesizing cyclized **somatostatin** analogs  
Q-(AA)a-NR-CHR1-CO-(AA)b-NR-CHR2-CO-(AA)c-E(R2 = a bond, a-c are 0-8, AA is an amino acid residue, Q = H, acyl, E = OH, carboxy-protecting group, or amino group, or the terminal carboxyl group can be reduced to CH2OH) and for producing libraries of the **somatostatin** analogs are disclosed. Thus, SST-Gly6,Gly11 analogs bridged at positions 1-3 were prepd. manually or with an automatic peptide synthesizer. Physiol. examples are given.

IT 203116-99-8P 203117-00-4P 203117-01-5P

203117-02-6P 203117-03-7P 203117-05-9P  
 203117-06-0P 203117-07-1P 203117-08-2P  
 203117-09-3P 203117-10-6P 203117-11-7P  
 203200-47-9P, PTR-3046

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (conformationally constrained backbone cyclized **somatostatin** analogs)

IT 9002-72-6, Growth hormone

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (conformationally constrained backbone cyclized **somatostatin** analogs)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1995:568949 HCAPLUS

DOCUMENT NUMBER: 123:1202

TITLE: Three-Dimensional Quantitative Structure-Activity Relationships of **Somatostatin** Analogs. 1. Comparative Molecular Field Analysis of Growth Hormone Release-Inhibiting Potencies

AUTHOR(S): Hocart, Simon J.; Reddy, Vik; Murphy, William A.; Coy, David H.

CORPORATE SOURCE: School of Medicine, Tulane University, New Orleans, LA, 70112, USA

SOURCE: Journal of Medicinal Chemistry (1995), 38(11), 1974-89  
 CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The previous work on the structure-activity relation of **somatostatin** and that of many others has generated a large database of analogs with different biol. activities and receptor affinities. This present work is an investigation of the growth hormone release-inhibiting potencies of **somatostatin** analogs by the 3-dimensional quant. structure-activity paradigm, comparative mol. field anal. (CoMFA). A total of 64 analogs were modeled in SYBYL using structural information from 2 NMR studies. The mols. were aligned by a root-mean-square fit of atoms and field-fit of the steric and electrostatic mol. fields and the resulting databases analyzed by partial least squares anal. with cross-validation to ext. the optimum no. of components. The anal. was then repeated without cross-validation to give the final QSAR models. Preliminary investigations with the CoMFA models led to the synthesis of a new **somatostatin** analog. This compd. together with 5 other newly synthesized compds. not included in the original training sets were used to test the predictive ability of the CoMFA models. Two models with good predictive powers are presented.

IT 38916-34-6D, **Somatostatin**, analogs 70512-60-6

81710-70-5 81710-73-8, L 362862 81710-74-9

81710-75-0 163514-46-3 163514-47-4

163514-48-5 163514-49-6 163514-50-9

163514-51-0

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)  
 (three-dimensional QSARs of **somatostatin** analogs and comparative mol. field anal. of growth hormone release-inhibiting potencies)

L57 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1994:293143 HCAPLUS

DOCUMENT NUMBER: 120:293143  
 TITLE: Radioactively-labeled **somatostatin**-derived peptides for imaging and therapeutic uses  
 INVENTOR(S): Dean, Richard T.; Lister-James, John  
 PATENT ASSIGNEE(S): Diatech, Inc., USA  
 SOURCE: PCT Int. Appl., 36 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 44  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9400489	A2	19940106	WO 1993-US6029	19930623
WO 9400489	A3	19940331		
W: AU, CA, JP, KR, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5716596	A	19980210	US 1992-902935	19920623
AU 9347688	A1	19940124	AU 1993-47688	19930623
AU 690071	B2	19980423		
EP 649434	A1	19950426	EP 1993-918129	19930623
EP 649434	B1	20010801		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
JP 08503924	T2	19960430	JP 1994-502568	19930623
EP 1094074	A2	20010425	EP 2000-122243	19930623
EP 1094074	A3	20020109		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
AT 203754	E	20010815	AT 1993-918129	19930623
ES 2164667	T3	20020301	ES 1993-918129	19930623
CA 2138647	C	20021112	CA 1993-2138647	19930623
ZA 9307596	A	19940804	ZA 1993-7596	19931013
AU 9470990	A1	19950117	AU 1994-70990	19940603
AU 701083	B2	19990121		
EP 720621	A1	19960710	EP 1994-920076	19940603
EP 720621	B1	20010207		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, SE				
AT 199089	E	20010215	AT 1994-920076	19940603
EP 1092726	A2	20010418	EP 2000-122241	19940603
EP 1092726	A3	20020109		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, IE				
EP 1099707	A2	20010516	EP 2000-122242	19940603
EP 1099707	A3	20020109		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, IE				
ES 2158897	T3	20010916	ES 1994-920076	19940603
ZA 9404498	A	19960624	ZA 1994-4498	19940623
US 5871711	A	19990216	US 1995-347397	19950113
US 5814298	A	19980929	US 1995-465764	19950606
US 5820845	A	19981013	US 1995-466100	19950606
US 5833942	A	19981110	US 1995-470932	19950606
US 5843401	A	19981201	US 1995-467025	19950606
AU 9877481	A1	19981001	AU 1998-77481	19980723
PRIORITY APPLN. INFO.:				
			US 1992-902935	A2 19920623
			EP 1993-918129	A3 19930623
			WO 1993-US6029	A 19930623
			US 1993-92355	A 19930715
			EP 1994-920076	A 19940603
			WO 1994-US6274	W 19940603

OTHER SOURCE(S): MARPAT 120:293143

AB Peptide derivs. and analogs of **somatostatin**, and embodiments of such peptides labeled with <sup>99m</sup>Tc, <sup>186</sup>Re, or <sup>188</sup>Re are presented, as well as methods and kits for making, radiolabeling and using such peptides for imaging or therapy in a mammalian body. CH<sub>2</sub>CO-FFWDKTFCCAc<sub>m</sub>GC<sub>m</sub>amide (I)

was prepd. by solid phase peptide synthesis and radiolabeled with  $^{99m}\text{Tc}$ . I inhibited binding of [ $^{125}\text{I}$ -Tyr $^{11}$ ]**somatostatin**-14 to AR42J rat pancreatic tumor cell membrane **somatostatin** receptors with a  $K_i = 0.16 \text{ nM}$ .

IT **51110-01-1D, Somatostatin**, analogs, radiolabeled

RL: BIOL (Biological study)

(for scintigraphic imaging and therapy)

IT **154887-73-7DP**, Tc-99 labeled

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

IT **154887-59-9P 154887-60-2P 154887-67-9P**

**154887-71-5P 154887-72-6P 154887-73-7P**

**154887-74-8P 154887-75-9P 154887-81-7P**

**154887-84-0P 154887-85-1P 154935-66-7DP**, Tc-99

labeled **154935-66-7P**

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of, as **somatostatin** analog, for radiolabeling for scintigraphic imaging and therapy)

L57 ANSWER 7 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1993:662666 HCAPLUS

DOCUMENT NUMBER: 119:262666

TITLE: Characterization of cloned **somatostatin** receptors SSTR4 and SSTR5

AUTHOR(S): Raynor, Karen; O'Carroll, Anne Marie; Kong, Haeyoung; Yasuda, Kazuki; Mahana, Lawrence C.; Bell, Graeme I.; Reisine, Terry

CORPORATE SOURCE: Sch. Med., Univ. Pennsylvania, Philadelphia, PA, 19104, USA

SOURCE: Molecular Pharmacology (1993), 44(2), 385-92  
CODEN: MOPMA3; ISSN: 0026-895X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The recent mol. cloning of the genes and cDNAs encoding multiple **somatostatin** (SRIF) receptor subtypes has allowed for the individual expression of these receptors in mammalian cells and characterization of their resp. pharmacol. profiles. Previously, the authors fully described and compared the pharmacol. properties of the first 3 SRIF receptor subtypes, SRIF receptor type (SSTR)1, SSTR2, and SSTR3. In the present study, the authors have investigated the properties of the newly cloned SRIF receptor subtypes SSTR4 and SSTR5 with regard to pharmacol. profiles, the regulation of high-affinity agonist binding to these receptors by stable GTP analogs,  $\text{Na}^+$ , or prior exposure to agonists, and the inhibition of forskolin-stimulated cAMP accumulation mediated by these receptors. The authors labeled SSTR4 and SSTR5 expressed in Chinese hamster ovary (CHO-K1) and COS-1 cells, resp., with the metabolically stable SRIF analog  $^{125}\text{I}$ -CGP 23996. Radioligand binding competition studies were performed using SRIF analogs of differing structures, including hexapeptide analogs similar to MK 678, octapeptide analogs similar to SMS 201-995, pentapeptide analogs similar to c[Ahep-Phe-D-Trp-Lys-Thr(Bzl)], and linear SRIF analogs. SSTR4 bound compds. in all structural classes with high to moderate affinities, and several compds. were identified that are >100-fold selective for SSTR4, compared with the other cloned SRIF receptors, including the linear SRIF analog BIM 23052 and the CGP 23996-like SRIF analog L 362,855. In contrast, SSTR5 bound very few SRIF analogs with high affinity. Both receptors could be regulated by prior exposure to agonist. In addn., agonist binding to SSTR4 was reduced by stable GTP analogs,  $\text{Na}^+$ , and pertussis toxin, but agonist binding to SSTR5 was not affected by these treatments. SSTR4 is efficiently coupled to the inhibition of adenylyl cyclase activity, whereas SSTR5 appears not to couple to this cellular effector system. Such differences between the cloned SRIF receptors provide useful strategies for identifying regions of these receptor

subtypes that may be involved in ligand-binding specificities and G protein and cellular effector system coupling. The identification of subtype-selective SRIF analogs may lead to more specific therapeutic interventions.

IT 38916-34-6, Somatostatin (sheep) 51110-01-1D,  
Somatostatin-14, analogs 58976-46-8 68463-41-2  
73032-94-7, Somatostatin-28 (sheep) 81710-73-8  
151396-54-2

RL: BIOL (Biological study)  
(cloned **somatostatin** SSTR4 and SSTR5 receptors interaction  
with)

L57 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1993:574313 HCAPLUS

DOCUMENT NUMBER: 119:174313

TITLE: Cloned **somatostatin** receptors:  
Identification of subtype-selective peptides and  
demonstration of high affinity binding of linear  
peptides

AUTHOR(S): Raynor, Karen; Murphy, William A.; Coy, David H.;  
Taylor, John E.; Moreau, Jacques Pierre; Yasuda,  
Kazuki; Bell, Graeme I.; Reisine, Terry

CORPORATE SOURCE: Sch. Med., Univ. Pennsylvania, Philadelphia, PA,  
19104, USA

SOURCE: Molecular Pharmacology (1993), 43(6), 838-44

CODEN: MOPMA3; ISSN: 0026-895X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The authors investigated the affinities of a battery of  
**somatostatin** (SRIF) analogs to bind to SRIF receptor subtypes  
SSTR1 (cloned **somatostatin** complex), SSTR2, and SSTR3, as well  
as their abilities to inhibit the release of growth hormone from anterior  
pituitary cells in vitro. SSTR1 and SSTR3 receptors expressed in Chinese  
hamster ovary and COS-1 cells, resp., were labeled with the metabolically  
stable SRIF analog 125I-CGP 23996. SSTR2 receptors expressed in Chinese  
hamster ovary cells were labeled with the SSTR2-specific radioligand  
125I-MK-678. Inhibition studies were performed using SRIF analogs of  
differing structures, including hexapeptide analogs similar to MK-678,  
octapeptide analogs similar to SMS 201-995, pentapeptide analogs similar  
to c[Ahep-Phe-D-Trp-Lys-Thr(Bzl)] (SA), and linear SRIF analogs. SSTR1  
bound SRIF and SRIF-28 with high affinity and the peptide SA and its  
structural analogs with low affinity. The hexapeptides did not interact  
with SSTR1 at concns. as high as 1 .mu.M, and only a few of the  
octapeptides or linear peptides bound, with very low affinities. In  
contrast, 125I-MK-678 binding to SSTR2 was potently inhibited by the  
hexapeptides, octapeptides, and some of the linear compds., whereas SA and  
its analogs did not bind to SSTR2. The potencies of the various SRIF  
agonists to inhibit growth hormone release in vitro was highly correlated  
with their potencies to inhibit radioligand binding to SSTR2, but not to  
SSTR1 or SSTR3. SSTR3 bound analogs of each class but with moderate to  
low affinities, with the exception of several linear peptides and one of  
the octapeptides. For the first time the binding affinities of linear  
analogs of SRIF, some of which display subnanomolar affinities and are  
highly selective for SRIF receptor subtypes, are reported. Most  
importantly, these studies identify several peptide analogs that are  
highly potent, specific, and selective for individual subtypes of SRIF  
receptors. Such information, coupled with the knowledge of the  
distribution of these receptor subtypes in normal and pathol. tissues,  
will be crit. for more specific exptl. and therapeutic interventions.

IT 9002-72-6, Growth hormone

RL: BIOL (Biological study)  
(release of, **somatostatin** analogs inhibition of, structure in  
relation to)

IT 38916-34-6, **Somatostatin** (sheep) 81710-73-8, L  
 362862 135048-17-8, BIM 23003  
 RL: BIOL (Biological study)  
 (**somatostatin** receptor subtype binding of, selectivity in  
 relation to)

L57 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1988:32093 HCAPLUS  
 DOCUMENT NUMBER: 108:32093  
 TITLE: Immunological properties of novel **somatostatin**  
 analogs  
 AUTHOR(S): Nakano, Takamitsu; Harano, Yutaka; Emura, Jyunji;  
 Kimura, Terutoshi; Sakakibara, Shumpei; Kodaira,  
 Tsukasa; Shigeta, Yukio  
 CORPORATE SOURCE: 3rd Dep. Med., Shiga Univ. Med. Sci., Otsu, 520-21,  
 Japan  
 SOURCE: Biomedical Research (1987), 8(5), 345-8  
 CODEN: BRES5; ISSN: 0388-6107  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Cross-reactivity of 6 novel **somatostatin** (SRIF) analogs was  
 examd. by SRIF-specific RIAs using anti-SRIF sera OAL-272 or OAL-283. The  
 analogs examd. possessed different chain-length in which the S-S linkages  
 was replaced by a methylene bridge of .alpha.-amino suberic acid (D-Asu).  
 In the assay using antiserum OAL-272, the labeled SRIF failed to displace  
 any of the 6 analogs, whereas in the assay with antiserum OAL-283, 5 of  
 the analogs with the exception of the shortest analog (Phe-D-Trp-Lys-Thr-D-  
 Asu) were bound very weakly (0.01-0.06% vs. SRIF). The results indicate  
 that antisera specific to each of the analogs will be required for assays  
 of these analogs in biol. fluids.

IT 38916-34-6, Cyclic **somatostatin** 38916-34-6D,  
 Cyclic **somatostatin**, analogs 70717-67-8  
 RL: BIOL (Biological study)  
 (immunol. properties of, mol. structure in relation to)

L57 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1986:454728 HCAPLUS  
 DOCUMENT NUMBER: 105:54728  
 TITLE: Development of specific and non-specific  
**somatostatin** analogs  
 AUTHOR(S): Nakano, T.; Harano, Y.; Emura, J.; Kimura, T.;  
 Sakakibara, S.; Shigeta, Y.  
 CORPORATE SOURCE: Third Dep. Med., Shiga Univ. Med. Sci., Shiga, Japan  
 SOURCE: Hormone and Metabolic Research (1986), 18(2), 98-102  
 CODEN: HMMRA2; ISSN: 0018-5043  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB The biol. activities of 6 cyclic **somatostatin** analogs contg.  
 D-.alpha.-aminosuberic acid (D-Asu) were examd. Cyclo(Phe-Phe-D-Trp-Lys-  
 Thr-Phe-D-Asu) (I) [70717-67-8] had a suppressive effect on  
 growth hormone (GH) [9002-72-6] secretion but had little if any  
 effect on insulin [9004-10-8], gastrin [9002-76-0], or glucagon  
 [9007-92-5] secretion in rats. Cyclo(Asn-Phe-Phe-D-Trp-Lys-Thr-Phe-Thr-D-  
 Asu) [103314-81-4] suppressed GH and insulin secretion, but not gastrin  
 or glucagon secretion. Cyclo(Lys-Asn-Phe-Phe-D-Trp-Lys-Thr-Phe-Thr-D-  
 Asu) (II) [75172-41-7] and cyclo(Lys-Asn-Phe-Phe-D-Trp-Lys-Thr-Phe-D-Asu)  
 (III) [103314-80-3] had broad suppressive effects on GH, gastrin,  
 insulin, and glucagon release after arginine infusion. The shortest  
 analog cyclo(Phe-D-Trp-Lys-Thr-D-Asu) [103314-79-0] had a weak  
 suppressive effect for GH, insulin, and glucagon secretion. Apparently,  
 phenylalanine in the 6 and 11 positions of **somatostatin** are  
 necessary for the suppression of GH. I may be useful for the future  
 treatment for acromegaly and diabetic retinopathy. II and III are

candidates for a wide variety of clin. applications.  
 IT **38916-34-6D**, analogs **70717-67-8**  
 RL: BIOL (Biological study)  
 (gastrointestinal hormone secretion response to, mol. structure in relation to)  
 IT **9002-72-6**  
 RL: BIOL (Biological study)  
 (secretion of, cyclic **somatostatin** analogs effect on, mol. structure in relation to)

L57 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1983:416912 HCAPLUS  
 DOCUMENT NUMBER: 99:16912  
 TITLE: **Somatostatin** receptor binding in rat cerebral cortex. Characterization using a nonreducible **somatostatin** analog  
 AUTHOR(S): Czernik, Andrew J.; Petrack, Barbara  
 CORPORATE SOURCE: Res. Dev. Dep., CIBA-GEIGY Corp., Ardsley, NY, 10502, USA  
 SOURCE: Journal of Biological Chemistry (1983), 258(9), 5525-30  
 CODEN: JBCHA3; ISSN: 0021-9258  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Specific, saturable, reversible, high-affinity binding sites for **somatostatin** [51110-01-1] were identified in synaptosomal membrane preps. of rat cerebral cortex, using the nonreducible analog, CGP 23996 (des-Ala1, Gly2-desamino-Cys3-[Tyr11]-dicarba3,14-**somatostatin**) [86170-12-9]. This analog, labeled with 125I, was significantly more resistant to degrdn. than N-125I-tyrosinyl-**somatostatin** and 125I-11-tyrosine-**somatostatin** during binding assays performed at 37.degree.. Bacitracin (20 .mu.g/mL) and MgCl2 (5 mM) each afforded further protection from degrdn., and in their presence 125I-CGP 23996 was almost fully protected (3% degrdn.). Specific binding of 125I-CGP 23996 reached steady state in 30 min and was stable for an addnl. 60 min. Scatchard anal. of binding data was linear, yielding a dissocn. const. of 2.4 nM and a maximal binding capacity of 450 fmol/mg of protein. The dissocn. const. derived from kinetic data was 2.6 nM. **Somatostatin** exhibited competitive inhibition of 125I-CGP 23996 binding, whereas unrelated neuropeptides were ineffective in displacing specific binding. The regional distribution of binding sites in rat brain was variable, with the highest levels in cerebral cortex and hippocampus and little binding in cerebellum. There was a good correlation between relative potency values of **somatostatin** analogs detd. in the binding expts. and in the isolated perfused rat pancreas bioassay. The use of 125I-CGP 23996 as the radioligand has permitted an accurate characterization of **somatostatin** receptor binding in rat brain in physiol. temp.

IT **51110-01-1**  
 RL: BIOL (Biological study)  
 (receptor for, of brain, characterization of)  
 IT **51110-01-1D**, analogs **62802-82-8** **67392-91-0**  
**70512-60-6** **77909-99-0** **83465-19-4**  
**86179-34-2**  
 RL: PROC (Process)  
 (**somatostatin** receptor binding of, in brain)

L57 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1982:450069 HCAPLUS  
 DOCUMENT NUMBER: 97:50069  
 TITLE: Characterization of pituitary membrane receptors for **somatostatin** in the rat  
 AUTHOR(S): Srikanth, C. B.; Patel, Y. C.

CORPORATE SOURCE: Fraser Lab., McGill Univ., Montreal, QC, H3A 1A1, Can.  
 SOURCE: Endocrinology (1982), 110(6), 2138-44  
 CODEN: ENDOAO; ISSN: 0013-7227  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB The presence of specific receptors for **somatostatin** (SRIF) [51110-01-1] in normal rat pituitary membranes have been demonstrated using [125I]-tyrosinell-SRIF as the radioligand. These receptors bind SRIF with high affinity ( $K_a$  .apprx.0.47 .times. 1010M-1) and have a max. binding capacity of 0.095 pmol/mg membrane protein. Two other radioiodinated SRIF analogs which contain N-terminally suited radiolabel, [125I]-tyrosinel-SRIF and [125I]-N-tyrosine-SRIF, were found unsuitable for receptor binding studies due to loss of the radiolabel from the ligand mol. under the exptl. conditions employed. Binding of [125I]-tyrosinell-SRIF to these receptors was specific and was not influenced by a variety of other neuropeptides. The specificity of SRIF receptors was also examd. using 10 synthetic SRIF analogs as well as catfish **somatostatin** I [73726-55-3]. Catfish **somatostatin** I was 8.3 times less potent than SRIF in binding to SRIF receptors, although it has been reported to be equipotent in terms of in vitro growth hormone (GH) [9002-72-6] inhibition. Analogs which exhibit greater potency for GH inhibition in vitro bound to these receptors with greater affinities than SRIF, whereas biol. inactive analogs showed markedly reduced binding, suggesting that the in vitro GH inhibitory actions of SRIF analogs are related to their ability to interact with SRIF receptors.

IT 51110-01-1

RL: BIOL (Biological study)  
 (receptors for, of pituitary gland cell membrane)

IT 9002-72-6

RL: BIOL (Biological study)  
 (secretion of, **somatostatin** analogs inhibition of, receptor binding in pituitary gland in relation to)

IT 58959-60-7 58976-46-8 59481-27-5

61950-59-2 66582-76-1 67392-89-6

67392-91-0 70512-60-6 73107-31-0

73236-68-7 73726-55-3

RL: BIOL (Biological study)  
 (**somatostatin** receptor binding of, in pituitary gland, growth hormone inhibition in relation to)

L57 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1982:439343 HCAPLUS

DOCUMENT NUMBER: 97:39343

TITLE: Functional group spectroscopy of peptides - an application of Fourier transform infrared (FTIR) absorbancesubtraction

AUTHOR(S): Ryan, James Arthur

CORPORATE SOURCE: Merck Sharp and Dohme Res. Lab. Div., Merck and Co., Inc., West Point, PA, 19486, USA

SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (1981), 289(Int. Conf. Fourier Transform Infrared Spectrosc.), 179-81  
 CODEN: PSISDG; ISSN: 0277-786X

DOCUMENT TYPE: Journal

LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB The title spectroscopy was applied to **somatostatin** analogs I (R = H, Cl, NO<sub>2</sub>, OH, NH<sub>2</sub>, X = Thr; R = H, X = Ser, Val), II, and III (Acm = CH<sub>2</sub>NHAc). When I (R = NO<sub>2</sub>, X = Thr) was mixed with bovine serum albumin, the 1518 and 1345 wave no. NO<sub>2</sub> bands of the NO<sub>2</sub> group were easily detectable by absorbance subtraction. This technique can be used for functional group anal. of proteins.



IT 51110-01-1D, analogs  
 RL: PRP (Properties)  
 (IR spectra of, Fourier transform IR absorbance subtraction in relation to)

IT 70512-60-6 81710-70-5 81710-73-8  
 81710-74-9 81710-75-0 81710-92-1  
 81710-94-3  
 RL: PRP (Properties)  
 (IR spectrum of, Fourier transform IR absorbance subtraction in relation to)

L57 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1982:193607 HCAPLUS  
 DOCUMENT NUMBER: 96:193607  
 TITLE: Synthesis and biological activity of **somatostatin** analogs of reduced ring size  
 AUTHOR(S): Brady, S. F.; Nutt, R. F.; Holly, F. W.; Paleveda, W. J.; Strachan, R. G.; Bergstrand, S. J.; Veber, D. F.; Saperstein, R.  
 CORPORATE SOURCE: Merck Sharp Dohme Res. Lab., West Point, PA, 19486, USA  
 SOURCE: Pept.: Synth., Struct., Funct., Proc. Am. Pept. Symp., 7th (1981), 653-6. Editor(s): Rich, Daniel H.; Gross, Erhard. Pierce Chem. Co.: Rockford, Ill.  
 CODEN: 47LMAO  
 DOCUMENT TYPE: Conference  
 LANGUAGE: English

AB The cyclic heptapeptide analog cyclic-(Aha-Phe-Phe-D-Trp-Lys-Thr-Phe) (I) [70512-60-6] along with 34 other cyclic analogs of **somatostatin** were synthesized by solid phase methods and tested for their ability to inhibit growth hormone [9002-72-6], insulin [9004-10-8], and glucagon [9007-92-5] release to assess the relative influence of the 7-10 amino acid residues of natural **somatostatin** on biol. potency. A wide range of arom. nuclei as substitutions at position 7 were without effect on biol. potency relative to I. Variations at position 8 produced a marked loss of potency relative to I. Derivatization of the lysine side chain at position 9 produced a complete loss of biol. potency. The primary .epsilon.-NH2 group of lysine at position 9 was essential for activity. Variations at position 10, such as deletion, addn. of a Me group, or .alpha.-substitution, decreased stability, suggesting a role for threonine in detg. the correct conformation for the peptide.

IT 9002-72-6  
 RL: BIOL (Biological study)  
 (release of, **somatostatin** analog inhibition of, structure in relation to)

IT 70512-60-6 72983-06-3 81710-70-5  
 81710-72-7 81710-73-8 81710-74-9  
 81710-75-0 81710-81-8 81710-82-9  
 81710-83-0 81710-88-5 81710-89-6  
 81710-92-1 81710-94-3 81726-61-6  
 81726-62-7 81797-01-5  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)  
 (**somatotropin** release inhibition by, structure in relation to)

L57 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1981:114892 HCAPLUS  
 DOCUMENT NUMBER: 94:114892  
 TITLE: **Somatostatin** analogs. Dissociation of brain receptor binding affinities and pituitary actions in the rat

AUTHOR(S): Srikant, C. B.; Patel, Y. C.  
 CORPORATE SOURCE: Fraser Lab., McGill Univ., Montreal, QC, H3A 1A1, Can.  
 SOURCE: Endocrinology (1981), 108(1), 341-3  
 CODEN: ENDOAO; ISSN: 0013-7227  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB A radioreceptor assay was used to examine the ability of 16 **somatostatin** (SRIF) [38916-34-6] analogs to interact with the receptors of rat brain synaptosomal membranes. Although structural modifications in the 8-tryptophan moiety of SRIF resulted in enhancement of affinity for binding to the brain SRIF receptors, the different relative specificities of des-amino acid<sup>1,2,4,5,12,13</sup>-D-tryptophan<sup>8</sup>-SRIF [70952-36-2], D-tryptophan<sup>8</sup>-SRIF [58976-46-8], and 5-bromo-D-tryptophan<sup>8</sup>-SRIF [67392-89-6] in the pituitary and the central nervous system suggest that basic differences exist between SRIF receptors present in the brain and the pituitary.

IT 58959-60-7 58976-46-8 59481-27-5  
 61425-92-1 61518-60-3 61950-59-2  
 66582-76-1 67374-96-3 67392-89-6  
 67392-91-0 70512-60-6 73107-31-0  
 76840-18-1

RL: PROC (Process)

(brain synaptosome binding of, structure in relation to)

IT 38916-34-6

RL: PROC (Process)

(receptor binding of, in brain synaptosome, structure in relation to)

L57 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1980:104734 HCAPLUS

DOCUMENT NUMBER: 92:104734

TITLE: Highly active cyclic and bicyclic **somatostatin** analogs of reduced ring size

AUTHOR(S): Veber, Daniel F.; Holly, Frederick W.; Nutt, Ruth F.; Bergstrand, Susan J.; Brady, Stephen F.; Hirschmann, Ralph; Glitzer, Monroe S.; Saperstein, Richard  
 CORPORATE SOURCE: Merck Sharp Dohme Res. Lab., West Point, PA, 19486, USA

SOURCE: Nature (London, United Kingdom) (1979), 280(5722), 512-14

CODEN: NATUAS; ISSN: 0028-0836

DOCUMENT TYPE: Journal

LANGUAGE: English

GI

NH(CH<sub>2</sub>)<sub>6</sub>CO-Cys-Phe-D-Trp-Lys-Thr-Cys-CO

III

AB Two conformationally constrained analogs of **somatostatin** (I) [38916-34-6] were synthesized, cyclo-(.omega.-aminoheptanoate-Phe-Phe-D-Trp-Lys-Thr-Phe) (II) [70512-60-6] and the bicyclic analog III [70706-79-5], III contained only amino acids 7-10 of I. II, and particularly, III showed high biol. activity. The high activity of II and III indicated that binding of I to receptors was due chiefly to amino acids 7-10. III was relatively resistant to trypsin hydrolysis in vitro but II was cleaved by trypsin at .apprx.100-fold the rate of hydrolysis of III; the disulfide bond of III appeared to add enzymic stability, either through conformational or steric constraint. Seventy-five minutes after s.c. administration of I, II, and III (50, 50, and 25 .mu.g, resp.) to

rats, both II and III inhibited the release of growth hormone (GH) whereas I did not; at 135 min after injection, only III showed inhibition of GH release. Thus, amino acids 7-10 of I, when constrained in the correct conformation, contain receptor binding elements sufficient to express the total activity of I for suppression of the release of insulin, glucagon, and GH. Conformationally constrained structures can therefore be designed to decrease susceptibility to metab. while retaining biol. activity.

IT 38916-34-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)  
(biol. activity of, structure in relation to)

IT 70512-60-6P 72983-06-3P

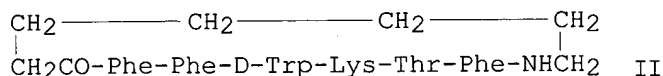
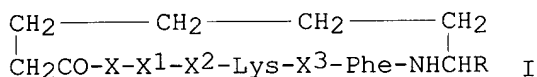
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(prepn. and biol. activity of)

L57 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1979:457549 HCAPLUS  
DOCUMENT NUMBER: 91:57549  
TITLE: **Somatostatin** analogs  
INVENTOR(S): Veber, Daniel F.  
PATENT ASSIGNEE(S): Merck and Co., Inc., USA  
SOURCE: U.S., 10 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4146612	A	19790327	US 1978-920529	19780629
EP 53	A1	19781220	EP 1978-100095	19780606
EP 53	B1	19810527		
R: BE, CH, DE, FR, GB, LU, NL, SE				
DK 7802527	A	19781209	DK 1978-2527	19780607
PRIORITY APPLN. INFO.:			US 1977-804678	19770608

GI

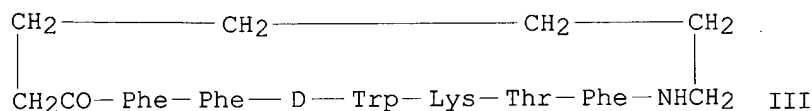
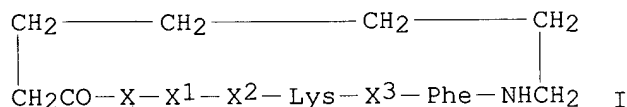


AB **Somatostatin** analogs I [X = Phe, Tyr, Tyr(Me); X1 = Phe, Tyr; X2 = Trp, D-Trp; X3 = Thr, Val; R = H, CO<sub>2</sub>H] and their pharmaceutically acceptable nontoxic acid addn. salts, useful as inhibitors of the release of growth hormone, glucagon, and insulin, were prepd. I can be used in the treatment of acromegaly and the management of diabetes. Thus, BOC-D-Trp-Lys(ZCl-2)-Thr(CH<sub>2</sub>PH)-Phe-NH(CH<sub>2</sub>)<sub>6</sub>CO-Phe-Phe-O-resin (BOC = Me<sub>3</sub>CO<sub>2</sub>C, ZCl-2 = CO<sub>2</sub>CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>Cl-2) was prepd. by the solid-phase method, deblocked, and resin-cleaved with NH<sub>2</sub>NH<sub>2</sub> to give H-D-Trp-Lys(ZCl-2)-Thr(CH<sub>2</sub>Ph)-Phe-NH(CH<sub>2</sub>)<sub>6</sub>CO-Phe-Phe-NHNH<sub>2</sub>. The latter was converted to the azide and cyclized to give cyclo[NH(CH<sub>2</sub>)<sub>6</sub>CO-Phe-Phe-D-Trp-Lys(ZCl-2)-Thr(CH<sub>2</sub>PH)-Phe], which was deblocked with HF/anisol to give **somatostatin** analog II.

- IT 70717-64-5P 70717-66-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. and deblocking of)
- IT 70512-60-6P 70717-67-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)
- IT 51110-01-1DP, analogs  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, by solid-phase method)
- IT 9002-72-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (release of, **somatostatin** analogs inhibition of)

L57 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1979:421128 HCAPLUS  
 DOCUMENT NUMBER: 91:21128  
 TITLE: **Somatostatin** analogs  
 PATENT ASSIGNEE(S): Merck and Co., Inc., USA  
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 54003085	A2	19790111	JP 1978-68723	19780607
EP 53	A1	19781220	EP 1978-100095	19780606
EP 53	B1	19810527		
R: BE, CH, DE, FR, GB, LU, NL, SE				
DK 7802527	A	19781209	DK 1978-2527	19780607
PRIORITY APPLN. INFO.: GI			US 1977-804678	19770608



- AB **Somatostatin** analogs I [X = Phe, Tyr, Tyr(Me); X<sup>1</sup> = Phe, Tyr; X<sup>2</sup> = Trp, D-Trp; X<sup>3</sup> = Thr, Val] were prepd. Thus, H-D-Trp-Lys(CO<sub>2</sub>CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>Cl-2)-Thr(CH<sub>2</sub>Ph)-Phe-NH(CH<sub>2</sub>)<sub>6</sub>CO-Phe-Phe-R (II, R = O-resin) was prepd. by the solid-phase method and then resin-cleaved with NH<sub>2</sub>NH<sub>2</sub> to give II (R = NHNH<sub>2</sub>), which was converted to the azide and cyclized to give the protected cyclic peptide, which was deblocking to give **somatostatin** analog III.
- IT 51110-01-1DP, analogs 70512-60-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

=> select hit rn 157 1-18  
 E307 THROUGH E391 ASSIGNED

=> fil reg

FILE 'REGISTRY' ENTERED AT 11:31:34 ON 22 JUL 2003  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
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STRUCTURE FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7  
DICTIONARY FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when  
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Crossover limits have been increased. . See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP  
PROPERTIES for more information. See STNote 27, Searching Properties  
in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> d his 158

(FILE 'HCAPLUS' ENTERED AT 11:31:06 ON 22 JUL 2003)  
SELECT HIT RN L57 1-18

FILE 'REGISTRY' ENTERED AT 11:31:34 ON 22 JUL 2003  
L58 58 S L54 AND E307-E391

=> d .seq 158 1-58

L58 ANSWER 1 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 209597-08-0 REGISTRY  
CN L-Valinamide, N-(2-carboxyethyl)-L-phenylalanyl-L-phenylalanyl-D-  
tryptophyl-L-lysyl-L-threonyl-N-(3-aminopropyl)-L-phenylalanyl-,  
(6.fwdarw.1)-lactam (9CI) (CA INDEX NAME)  
NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge	Phe-1	-	Phe-6	covalent bridge
stereo	Trp-3	-		D

SQL 7  
RN 209597-08-0 REGISTRY  
SQL 7

SEQ 1 FFWKTFV

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 129:95723

L58 ANSWER 2 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 209597-07-9 REGISTRY  
CN L-Valinamide, N-(2-aminoethyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-  
lysyl-L-threonyl-N-(3-carboxypropyl)-L-phenylalanyl-, (6.fwdarw.1)-lactam

(9CI) (CA INDEX NAME)  
NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge		Phe-1	- Phe-6	covalent bridge
stereo		Trp-3	-	D

SQL 7  
RN 209597-07-9 REGISTRY  
SQL 7

SEQ 1 FYWKTFV

=====

HITS AT: 1-7

REFERENCE 1: 129:95723

L58 ANSWER 3 OF 58. REGISTRY COPYRIGHT 2003 ACS on STN  
RN 209597-05-7 REGISTRY  
CN L-Threoninamide, N-(3-aminopropyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-threonyl-N-(3-carboxypropyl)-L-phenylalanyl-, (6.fwdarw.1)-lactam  
(9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge		Phe-1	- Phe-6	covalent bridge
stereo		Trp-3	-	D

SQL 7  
RN 209597-05-7 REGISTRY  
SQL 7

SEQ 1 FYWKTFT

=====

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 129:95723

L58 ANSWER 4 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 209597-04-6 REGISTRY  
CN L-Threoninamide, N-(2-aminoethyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-threonyl-N-(3-carboxypropyl)-L-phenylalanyl-, (6.fwdarw.1)-lactam  
(9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge		Phe-1	- Phe-6	covalent bridge
stereo		Trp-3	-	D

SQL 7  
RN 209597-04-6 REGISTRY  
SQL 7

SEQ 1 FYWKTFT

=====

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 129:95723

L58 ANSWER 5 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 209597-03-5 REGISTRY

CN L-Valinamide, N-(2-aminoethyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl-N-(3-carboxypropyl)-L-phenylalanyl-, (6.fwdarw.1)-lactam (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

type	location	description
bridge	Phe-1 - Phe-6	covalent bridge
stereo	Trp-3 -	D

SQL 7

RN 209597-03-5 REGISTRY

SQL 7

SEQ 1 FYWKVFV

=====

HITS AT: 1-7

REFERENCE 1: 129:95723

L58 ANSWER 6 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 209597-02-4 REGISTRY

CN L-Threoninamide, N-carboxy-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl-N-(3-aminopropyl)-L-phenylalanyl-, (1.fwdarw.6)-lactam (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

type	location	description
bridge	Phe-1 - Phe-6	covalent bridge
stereo	Trp-3 -	D

SQL 7

RN 209597-02-4 REGISTRY

SQL 7

SEQ 1 FYWKVFT

=====

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 129:95723

L58 ANSWER 7 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 204707-77-7 REGISTRY

CN Cyclo(L-lysyl-L-threonyl-L-phenylalanyl-8-aminooctanoyl-L-phenylalanyl-4-chloro-L-phenylalanyl-D-tryptophyl) (9CI) (CA INDEX NAME)

NTE cyclic

modified (modifications unspecified)

type	location	description
uncommon	Oaa-4 -	-
modification	Phe-6 -	chloro<Cl>

SQL 7

RN 204707-77-7 REGISTRY

SQL 7

SEQ 1 KTFXFFW

=====

HITS AT: 1-4, 5-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 128:239911

L58 ANSWER 8 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 203200-47-9 REGISTRY

CN L-Threoninamide, N-(2-aminoethyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl-N-(3-carboxypropyl)-L-phenylalanyl-, (6.fwdarw.1)-lactam (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3046

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge		Phe-1	- Phe-6	covalent bridge
stereo		Trp-3	-	D

SQL 7

RN 203200-47-9 REGISTRY

SQL 7

SEQ 1 FYWKVFT

=====

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 129:95723

REFERENCE 2: 128:226364

REFERENCE 3: 128:180672

L58 ANSWER 9 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 203117-11-7 REGISTRY

CN L-Valinamide, N-(2-aminoethyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-N-(3-carboxypropyl)-L-phenylalanyl-, (6.fwdarw.1)-lactam (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge		Phe-1	- Phe-6	covalent bridge
stereo		Trp-3	-	D

SQL 7

RN 203117-11-7 REGISTRY

SQL 7

SEQ 1 FFWKTFV

=====

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 128:180672



L58 ANSWER 10 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 203117-10-6 REGISTRY  
CN L-Threoninamide, N-(3-aminopropyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-N-(3-carboxypropyl)-L-phenylalanyl-, (6.fwdarw.1)-lactam (9CI) (CA INDEX NAME)  
NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge		Phe-1	- Phe-6	covalent bridge
stereo		Trp-3	-	D

SQL 7  
RN 203117-10-6 REGISTRY  
SQL 7

SEQ 1 FFWKTF

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 128:180672

L58 ANSWER 11 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 203117-09-3 REGISTRY  
CN L-Threoninamide, N-(2-aminoethyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-N-(3-carboxypropyl)-L-phenylalanyl-, (6.fwdarw.1)-lactam (9CI) (CA INDEX NAME)  
NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge		Phe-1	- Phe-6	covalent bridge
stereo		Trp-3	-	D

SQL 7  
RN 203117-09-3 REGISTRY  
SQL 7

SEQ 1 FFWKTF

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 128:180672

L58 ANSWER 12 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 203117-08-2 REGISTRY  
CN L-Threoninamide, N-(2-aminoethyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-valyl-N-(3-carboxypropyl)-L-phenylalanyl-, (6.fwdarw.1)-lactam (9CI) (CA INDEX NAME)  
NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge		Phe-1	- Phe-6	covalent bridge
stereo		Trp-3	-	D

SQL 7  
RN 203117-08-2 REGISTRY

SQL 7

SEQ 1 FFWKVFT

=====

HITS AT: 1-7

REFERENCE 1: 128:180672

L58 ANSWER 13 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 203117-07-1 REGISTRY

CN L-Valinamide, N-(2-aminoethyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-valyl-N-(3-carboxypropyl)-L-phenylalanyl-, (6.fwdarw.1)-lactam (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge		Phe-1	- Phe-6	covalent bridge
stereo		Trp-3	-	D

SQL 7

RN 203117-07-1 REGISTRY

SQL 7

SEQ 1 FFWKVFV

=====

HITS AT: 1-7

REFERENCE 1: 128:180672

L58 ANSWER 14 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 203117-06-0 REGISTRY

CN L-Threoninamide, N-(3-carboxypropyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl-N-(3-aminopropyl)-L-phenylalanyl-, (1.fwdarw.6)-lactam (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge		Phe-1	- Phe-6	covalent bridge
stereo		Trp-3	-	D

SQL 7

RN 203117-06-0 REGISTRY

SQL 7

SEQ 1 FYWKVFT

=====

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 129:95723

REFERENCE 2: 128:180672

L58 ANSWER 15 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 203117-05-9 REGISTRY

CN L-Threoninamide, N-(carboxymethyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl-N-(3-aminopropyl)-L-phenylalanyl-, (1.fwdarw.6)-lactam (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge		Phe-1	- Phe-6	covalent bridge
stereo		Trp-3	-	D

SQL 7  
RN 203117-05-9 REGISTRY  
SQL 7

SEQ 1 FYWKVFT

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 128:180672

L58 ANSWER 16 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 203117-03-7 REGISTRY  
CN L-Threoninamide, N-(3-carboxypropyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-  
L-lysyl-L-valyl-N-(2-aminoethyl)-L-phenylalanyl-, (1.fwdarw.6)-lactam  
(9CI) (CA INDEX NAME)  
NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge		Phe-1	- Phe-6	covalent bridge
stereo		Trp-3	-	D

SQL 7  
RN 203117-03-7 REGISTRY  
SQL 7

SEQ 1 FYWKVFT

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 129:95723

REFERENCE 2: 128:180672

L58 ANSWER 17 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 203117-02-6 REGISTRY  
CN L-Threoninamide, N-(2-carboxyethyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-  
L-lysyl-L-valyl-N-(2-aminoethyl)-L-phenylalanyl-, (1.fwdarw.6)-lactam  
(9CI) (CA INDEX NAME)  
NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge		Phe-1	- Phe-6	covalent bridge
stereo		Trp-3	-	D

SQL 7  
RN 203117-02-6 REGISTRY  
SQL 7

SEQ 1 FYWKVFT

HITS AT: 1-7

## \*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 129:95723

REFERENCE 2: 128:180672

L58 ANSWER 18 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 203117-01-5 REGISTRY

CN L-Threoninamide, N-(3-aminopropyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl-N-(2-carboxyethyl)-L-phenylalanyl-, (6.fwdarw.1)-lactam  
(9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge		Phe-1	- Phe-6	covalent bridge
stereo		Trp-3	-	D

SQL 7

RN 203117-01-5 REGISTRY

SQL 7

SEQ 1 FYWKVFT

=====

HITS AT: 1-7

## \*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 129:95723

REFERENCE 2: 128:180672

L58 ANSWER 19 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 203117-00-4 REGISTRY

CN L-Threoninamide, N-(2-aminoethyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl-N-(2-carboxyethyl)-L-phenylalanyl-, (6.fwdarw.1)-lactam  
(9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge		Phe-1	- Phe-6	covalent bridge
stereo		Trp-3	-	D

SQL 7

RN 203117-00-4 REGISTRY

SQL 7

SEQ 1 FYWKVFT

=====

HITS AT: 1-7

## \*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 129:95723

REFERENCE 2: 128:180672

L58 ANSWER 20 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 203116-99-8 REGISTRY

CN L-Threoninamide, N-(3-aminopropyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl-N-(3-carboxypropyl)-L-phenylalanyl-, (6.fwdarw.1)-lactam  
(9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

type	location	description
bridge	Phe-1 - Phe-6	covalent bridge
stereo	Trp-3 -	D

SQL 7

RN 203116-99-8 REGISTRY

SQL 7

SEQ 1 FYWKVFT

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 129:95723

REFERENCE 2: 128:180672

L58 ANSWER 21 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 163514-51-0 REGISTRY

CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-5-methoxy-L-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI) (CA INDEX NAME)

NTE cyclic

modified (modifications unspecified)

type	location	description
uncommon	Oaa-4 -	-

SQL 7

RN 163514-51-0 REGISTRY

SQL 7

SEQ 1 KTFXFFW

HITS AT: 1-4, 5-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 123:1202

L58 ANSWER 22 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 163514-50-9 REGISTRY

CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-5-bromo-L-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI) (CA INDEX NAME)

NTE cyclic

modified (modifications unspecified)

type	location	description
uncommon	Oaa-4 -	-
modification	Trp-7 -	bromo 

SQL 7

RN 163514-50-9 REGISTRY

SQL 7

SEQ 1 KTFXFFW

=====

HITS AT: 1-4, 5-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 123:1202

L58 ANSWER 23 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 163514-49-6 REGISTRY  
CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-6-fluoro-L-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI)  
(CA INDEX NAME)  
NTE cyclic  
modified (modifications unspecified)

type	location			description
uncommon	Oaa-4	-	-	
modification	Trp-7	-		fluoro<F>

SQL 7  
RN 163514-49-6 REGISTRY  
SQL 7

SEQ 1 KTFXFFW

=====

HITS AT: 1-4, 5-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 123:1202

L58 ANSWER 24 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 163514-48-5 REGISTRY  
CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-5-fluoro-L-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI)  
(CA INDEX NAME)  
NTE cyclic  
modified (modifications unspecified)

type	location			description
uncommon	Oaa-4	-	-	
modification	Trp-7	-		fluoro<F>

SQL 7  
RN 163514-48-5 REGISTRY  
SQL 7

SEQ 1 KTFXFFW

=====

HITS AT: 1-4, 5-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 123:1202

L58 ANSWER 25 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 163514-47-4 REGISTRY  
CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-5-methyl-L-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI)  
(CA INDEX NAME)  
NTE cyclic

modified (modifications unspecified)

type	location		description
uncommon	Oaa-4	-	-
modification	Trp-7	-	methyl<Me>

SQL 7  
 RN 163514-47-4 REGISTRY  
 SQL 7

SEQ 1 KTFXFFW  
 =====

HITS AT: 1-4, 5-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 123:1202

L58 ANSWER 26 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 163514-46-3 REGISTRY  
 CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-4-fluoro-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI) (CA INDEX NAME)

NTE cyclic  
 modified (modifications unspecified)

type	location		description
uncommon	Oaa-4	-	-
modification	Phe-6	-	fluoro<F>

SQL 7  
 RN 163514-46-3 REGISTRY  
 SQL 7

SEQ 1 KTFXFFW  
 =====

HITS AT: 1-4, 5-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 123:1202

L58 ANSWER 27 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 154935-66-7 REGISTRY  
 CN L-Cysteinamide, N-(bromoacetyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N-[2-[(5-aminopentyl)(2-mercapto-2-methylpropyl)amino]ethyl]-N-(2-mercapto-2-methylpropyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

type	location		description
modification	Phe-1	-	bromoacetyl<Bac>

SQL 7  
 RN 154935-66-7 REGISTRY  
 SQL 7

SEQ 1 FFWKTEC  
 =====

HITS AT: 1-7

## \*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 120:293143

L58 ANSWER 28 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 154887-85-1 REGISTRY

CN L-Cysteine, N-[N-[N-[N2-[N-[N-[N-(bromoacetyl)-L-phenylalanyl]-L-tyrosyl]-D-tryptophyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

type	location	description
modification	Phe-1	bromoacetyl<Bac>

SQL 7

RN 154887-85-1 REGISTRY

SQL 7

SEQ 1 FYWKTFC

HITS AT: 1-7

## \*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 120:293143

L58 ANSWER 29 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 154887-84-0 REGISTRY

CN L-Norvaline, N-[N-[N-[N2-[N-[N-[N-(bromoacetyl)-L-phenylalanyl]-L-phenylalanyl]-D-tryptophyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]-5-mercapto- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

type	location	description
uncommon	Nva-7	-
stereo	Trp-3	D

SQL 7

RN 154887-84-0 REGISTRY

SQL 7

SEQ 1 FFWKTFX

HITS AT: 1-7

## \*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 120:293143

L58 ANSWER 30 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 154887-81-7 REGISTRY

CN L-Homocysteine, N-[N-[N-[N2-[N-[N-[N-(bromoacetyl)-L-phenylalanyl]-L-phenylalanyl]-D-tryptophyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

type	location	description
uncommon	Hcy-7	-
modification	Phe-1	bromoacetyl<Bac>



SQL 7  
RN 154887-81-7 REGISTRY  
SQL 7

SEQ 1 FFWKTFX  
=====

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 120:293143

L58 ANSWER 31 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 154887-75-9 REGISTRY  
CN L-Cysteinamide, N-(bromoacetyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-  
L-lysyl-L-threonyl-L-phenylalanyl- (9CI) (CA INDEX NAME)  
NTE modified

type	-----	location	-----	description
terminal mod.	Cys-7	-		C-terminal amide
modification	Phe-1	-		bromoacetyl<Bac>

SQL 7  
RN 154887-75-9 REGISTRY  
SQL 7

SEQ 1 FFWKTFC  
=====

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 120:293143

L58 ANSWER 32 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 154887-74-8 REGISTRY  
CN L-Cysteine, N-[N-[N-[N2-[N-[N-(bromoacetyl)-L-phenylalanyl]-L-  
phenylalanyl]-D-tryptophyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]- (9CI)  
(CA INDEX NAME)  
NTE modified (modifications unspecified)

type	-----	location	-----	description
modification	Phe-1	-		bromoacetyl<Bac>

SQL 7  
RN 154887-74-8 REGISTRY  
SQL 7

SEQ 1 FFWKTFC  
=====

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 120:293143

L58 ANSWER 33 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 154887-73-7 REGISTRY  
CN L-Cysteinamide, N-(chloroacetyl)-L-phenylalanyl-L-phenylalanyl-D-  
tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N-[2-[(5-aminopentyl)(2-  
mercapto-2-methylpropyl)amino]ethyl]-N-(2-mercapto-2-methylpropyl)- (9CI)

(CA INDEX NAME)

NTE modified (modifications unspecified)

type	location	description
modification	Phe-1	undetermined modification

SQL 7

RN 154887-73-7 REGISTRY

SQL 7

SEQ 1 FFWKTFC

=====

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 120:293143

L58 ANSWER 34 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 154887-72-6 REGISTRY

CN L-Cysteine, N-[N-[N-[N2-[N-[N-[N-(chloroacetyl)-L-phenylalanyl]-L-tyrosyl]-D-tryptophyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

type	location	description
modification	Phe-1	undetermined modification

SQL 7

RN 154887-72-6 REGISTRY

SQL 7

SEQ 1 FYWKTFC

=====

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 120:293143

L58 ANSWER 35 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 154887-71-5 REGISTRY

CN L-Norvaline, N-[N-[N-[N2-[N-[N-[N-(chloroacetyl)-L-phenylalanyl]-L-phenylalanyl]-D-tryptophyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]-5-mercapto- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

type	location	description
uncommon	Nva-7	-
stereo	Trp-3	D

SQL 7

RN 154887-71-5 REGISTRY

SQL 7

SEQ 1 FFWKTFX

=====

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 120:293143

L58 ANSWER 36 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 154887-67-9 REGISTRY

CN L-Homocysteine, N-[N-[N-[N2-[N-[N-[N-(chloroacetyl)-L-phenylalanyl]-L-phenylalanyl]-D-tryptophyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]- (9CI)  
(CA INDEX NAME)

NTE modified (modifications unspecified)

type	location		description
uncommon	Hcy-7	-	-
modification	Phe-1	-	undetermined modification

SQL 7

RN 154887-67-9 REGISTRY

SQL 7

SEQ 1 FFWKTFX

=====

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 120:293143

L58 ANSWER 37 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 154887-60-2 REGISTRY

CN L-Cysteinamide, N-(chloroacetyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

NTE modified

type	location		description
terminal mod.	Cys-7	-	C-terminal amide
modification	Phe-1	-	undetermined modification

SQL 7

RN 154887-60-2 REGISTRY

SQL 7

SEQ 1 FFWKTFC

=====

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 120:293143

L58 ANSWER 38 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 154887-59-9 REGISTRY

CN L-Cysteine, N-[N-[N-[N2-[N-[N-[N-(chloroacetyl)-L-phenylalanyl]-L-phenylalanyl]-D-tryptophyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]- (9CI)  
(CA INDEX NAME)

NTE modified (modifications unspecified)

type	location		description
modification	Phe-1	-	undetermined modification

SQL 7

RN 154887-59-9 REGISTRY

SQL 7

SEQ 1 FFWKTFC

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 120:293143

L58 ANSWER 39 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 81797-01-5 REGISTRY

CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-N6-(1-iminoethyl)-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.

NTE cyclic

modified (modifications unspecified)

type	location	description
uncommon	Oaa-4	-
modification	Lys-1	1-iminoethyl

SQL 7

RN 81797-01-5 REGISTRY

SQL 7

SEQ 1 KTFXFFW

HITS AT: 1-4, 5-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 96:193607

L58 ANSWER 40 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 81726-62-7 REGISTRY

CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-5-methyltryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.

CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-5-methyl-DL-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide

NTE cyclic

modified (modifications unspecified)

type	location	description
uncommon	Oaa-4	-
modification	Trp-7	methyl<Me>

SQL 7

RN 81726-62-7 REGISTRY

SQL 7

SEQ 1 KTFXFFW

HITS AT: 1-4, 5-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 96:193607

L58 ANSWER 41 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 81726-61-6 REGISTRY

CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-1-methyltryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI)  
(CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.

CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-1-methyl-DL-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide

NTE cyclic

modified (modifications unspecified)

type	location		description
uncommon	Oaa-4	-	-
modification	Trp-7	-	methyl<Me>

SQL 7

RN 81726-61-6 REGISTRY

SQL 7

SEQ 1 KTFXFFW

=====

HITS AT: 1-4, 5-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 96:193607

L58 ANSWER 42 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 81710-94-3 REGISTRY

CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-valyl-, cyclic (6.fwdarw.1)-peptide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.

NTE cyclic

type	location		description
uncommon	Oaa-4	-	-

SQL 7

RN 81710-94-3 REGISTRY

SQL 7

SEQ 1 KVFXFFW

=====

HITS AT: 1-4, 5-7

REFERENCE 1: 97:39343

REFERENCE 2: 96:193607

L58 ANSWER 43 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 81710-92-1 REGISTRY

CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-seryl-, cyclic (6.fwdarw.1)-peptide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.

NTE cyclic

type	location	description
uncommon	Oaa-4	-

SQL 7  
 RN 81710-92-1 REGISTRY  
 SQL 7

SEQ 1 KSFXFFW

HITS AT: 1-4, 5-7

REFERENCE 1: 97:39343

REFERENCE 2: 96:193607

L58 ANSWER 44 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 81710-89-6 REGISTRY  
 CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-N6,N6-dimethyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.

NTE cyclic  
 modified (modifications unspecified)

type	location	description
uncommon	Oaa-4	-
modification	Lys-1	methyl<2; Me>

SQL 7  
 RN 81710-89-6 REGISTRY  
 SQL 7

SEQ 1 KTFXFFW

HITS AT: 1-4, 5-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 96:193607

L58 ANSWER 45 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 81710-88-5 REGISTRY  
 CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-N6-methyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.

NTE cyclic  
 modified (modifications unspecified)

type	location	description
uncommon	Oaa-4	-
modification	Lys-1	methyl<Me>

SQL 7  
 RN 81710-88-5 REGISTRY  
 SQL 7

SEQ 1 KTFXFFW  
=====

HITS AT: 1-4, 5-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 96:193607

L58 ANSWER 46 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 81710-83-0 REGISTRY

CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-5-bromotryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI)  
(CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.

CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-5-bromo-DL-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide

NTE cyclic

modified (modifications unspecified)

type	location	description
uncommon	Oaa-4	-
modification	Trp-7	bromo 

SQL 7

RN 81710-83-0 REGISTRY

SQL 7

SEQ 1 KTFXFFW

=====

HITS AT: 1-4, 5-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 96:193607

L58 ANSWER 47 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 81710-82-9 REGISTRY

CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-6-fluorotryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI)  
(CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.

CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-6-fluoro-DL-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide

NTE cyclic

modified (modifications unspecified)

type	location	description
uncommon	Oaa-4	-
modification	Trp-7	fluoro<F>

SQL 7

RN 81710-82-9 REGISTRY

SQL 7

SEQ 1 KTFXFFW

=====

HITS AT: 1-4, 5-7

## \*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 96:193607

L58 ANSWER 48 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN  
RN **81710-81-8** REGISTRY  
CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-5-fluorotryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI)  
(CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.  
CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-5-fluoro-DL-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide  
NTE cyclic  
modified (modifications unspecified)

type	location		description
uncommon	Oaa-4	-	-
modification	Trp-7	-	fluoro<F>

SQL 7  
RN **81710-81-8** REGISTRY  
SQL 7

SEQ 1 KTFXFFW  
=====

HITS AT: 1-4, 5-7

## \*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 96:193607

L58 ANSWER 49 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN  
RN **81710-75-0** REGISTRY  
CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-4-amino-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.  
NTE cyclic  
modified (modifications unspecified)

type	location		description
uncommon	Oaa-4	-	-
modification	Phe-6	-	amino<NH2>

SQL 7  
RN **81710-75-0** REGISTRY  
SQL 7

SEQ 1 KTFXFFW  
=====

HITS AT: 1-4, 5-7

## \*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 123:1202

REFERENCE 2: 97:39343

REFERENCE 3: 96:193607



L58 ANSWER 50 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 81710-74-9 REGISTRY

CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-4-nitro-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.

NTE cyclic

modified (modifications unspecified)

type	location		description
uncommon	Oaa-4	-	-
modification	Phe-6	-	nitro<N>

SQL 7

RN 81710-74-9 REGISTRY

SQL 7

SEQ 1 KTFXFFW

=====

HITS AT: 1-4, 5-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 123:1202

REFERENCE 2: 97:39343

REFERENCE 3: 96:193607

L58 ANSWER 51 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 81710-73-8 REGISTRY

CN Cyclo(7-aminoheptanoyl-L-phenylalanyl-4-chloro-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.

CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-4-chloro-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide

OTHER NAMES:

CN L 362862

NTE cyclic

modified (modifications unspecified)

type	location		description
uncommon	Oaa-4	-	-
modification	Phe-6	-	chloro<Cl>

SQL 7

RN 81710-73-8 REGISTRY

SQL 7

SEQ 1 KTFXFFW

=====

HITS AT: 1-4, 5-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 123:1202

REFERENCE 2: 119:262666

REFERENCE 3: 119:174313

REFERENCE 4: 97:39343

REFERENCE 5: 96:193607

L58 ANSWER 52 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 81710-72-7 REGISTRY

CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-4-fluorophenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.

CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-4-fluoro-DL-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide

NTE cyclic

modified (modifications unspecified)

type	location	description
uncommon	Oaa-4	-
modification	Phe-6	fluoro<F>

SQL 7

RN 81710-72-7 REGISTRY

SQL 7

SEQ 1 KTFXFFW

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HITS AT: 1-4, 5-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 96:193607

L58 ANSWER 53 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 81710-70-5 REGISTRY

CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.

NTE cyclic

type	location	description
uncommon	Oaa-4	-

SQL 7

RN 81710-70-5 REGISTRY

SQL 7

SEQ 1 KTFXFW

=====

HITS AT: 1-4, 5-7

REFERENCE 1: 123:1202

REFERENCE 2: 97:39343

REFERENCE 3: 96:193607

L58 ANSWER 54 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 72983-06-3 REGISTRY  
 CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-L-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI) (CA INDEX NAME)

## OTHER CA INDEX NAMES:

CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.  
 NTE cyclic

type	location	description
uncommon	Oaa-4	-

SQL 7

RN 72983-06-3 REGISTRY

SQL 7

SEQ 1 KTFXFFW

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HITS AT: 1-4, 5-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 96:193607

REFERENCE 2: 92:104734

L58 ANSWER 55 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 70717-67-8 REGISTRY

CN L-Phenylalanine, N-(7-amino-7-carboxy-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide, (R)- (9CI) (CA INDEX NAME)

## OTHER CA INDEX NAMES:

CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.  
 NTE

type	location	description
bridge	Phe-1 - Asu-7	lactam
uncommon	Asu-7	-
stereo	Trp-3	D

SQL 7

RN 70717-67-8 REGISTRY

SQL 7

SEQ 1 FFWKTFX

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HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 108:32093

REFERENCE 2: 105:54728

REFERENCE 3: 91:57549

L58 ANSWER 56 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 70717-66-7 REGISTRY

CN L-Phenylalanine, N-(7-amino-7-carboxy-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-N6-[[ (2-chlorophenyl)methoxy]carbonyl]-L-lysyl-O-(phenylmethyl)-L-threonyl-, cyclic (6.fwdarw.1)-peptide, (R)- (9CI) (CA

## INDEX NAME)

## OTHER CA INDEX NAMES:

CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.  
 NTE modified (modifications unspecified)

type	----- location -----	description
bridge	Phe-1 - Asu-7	lactam
uncommon	Asu-7	-
stereo	Trp-3	D

SQL 7  
 RN 70717-66-7 REGISTRY  
 SQL 7

SEQ 1 FFWKTFX  
 =====

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 91:57549

L58 ANSWER 57 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 70717-64-5 REGISTRY

CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-N6-[[ (2-chlorophenyl)methoxy]carbonyl]-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI) (CA INDEX NAME)

## OTHER CA INDEX NAMES:

CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.

NTE cyclic  
 modified (modifications unspecified)

type	----- location -----	description
uncommon	Oaa-4	-
modification	Lys-1	[(2-chlorophenyl)methoxy]carbonyl<2CZ>

SQL 7  
 RN 70717-64-5 REGISTRY  
 SQL 7

SEQ 1 KTFXFFW  
 =====

HITS AT: 1-4, 5-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 91:57549

L58 ANSWER 58 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 70512-60-6 REGISTRY

CN L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI) (CA INDEX NAME)

## OTHER CA INDEX NAMES:

CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.

NTE cyclic

type	----- location -----	description
uncommon	Oaa-4	-

-----  
SQL 7  
RN 70512-60-6 REGISTRY  
SQL 7

SEQ 1 KTFXFFW  
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HITS AT: 1-4, 5-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 123:1202  
REFERENCE 2: 99:16912  
REFERENCE 3: 97:50069  
REFERENCE 4: 97:39343  
REFERENCE 5: 96:193607  
REFERENCE 6: 94:114892  
REFERENCE 7: 92:104734  
REFERENCE 8: 91:57549  
REFERENCE 9: 91:21128

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L64	0	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L63 AND L24

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FILE LAST UPDATED: 21 Jul 2003 (20030721/ED)

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L69 2 SEA FILE=REGISTRY ABB=ON PLU=ON CFWWKTFG/SQSP  
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L71 14 SEA FILE=REGISTRY ABB=ON PLU=ON L68 NOT L69  
L72 7 SEA FILE=HCAPLUS ABB=ON PLU=ON L71  
L73 7 SEA FILE=HCAPLUS ABB=ON PLU=ON L72 NOT L70

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L73 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 2003:521944 HCAPLUS  
DOCUMENT NUMBER: 139:47966  
TITLE: The complete genome sequence of the carcinogenic bacterium *Helicobacter hepaticus*  
AUTHOR(S): Suerbaum, Sebastian; Josenhans, Christine; Sterzenbach, Torsten; Drescher, Bernd; Brandt, Petra; Bell, Monica; Droege, Marcus; Fartmann, Berthold; Fischer, Hans-Peter; Ge, Zhongming; Hoerster, Andrea; Holland, Rudi; Klein, Kerstin; Koenig, Jochen; Macko, Ludwig; Mendz, George L.; Nyakatura, Gerald; Schauer, David B.; Shen, Zeli; Weber, Jacqueline; Frosch, Matthias; Fox, James G.  
CORPORATE SOURCE: Institute of Hygiene and Microbiology, University of Wuerzburg, Wuerzburg, D-97080, Germany  
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (2003), 100(13), 7901-7906  
CODEN: PNASA6; ISSN: 0027-8424  
PUBLISHER: National Academy of Sciences  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB *Helicobacter hepaticus* causes chronic hepatitis and liver cancer in mice.

It is the prototype enterohepatic *Helicobacter* species and a close relative of *Helicobacter pylori*, also a recognized carcinogen. This report describes the complete genome sequence of *H. hepaticus* ATCC51449. *H. hepaticus* has a circular chromosome of 1,799,146 base pairs, predicted to encode 1875 proteins. A total of 938, 953, and 821 proteins have orthologs in *H. pylori*, *Campylobacter jejuni*, and both pathogens, resp. *H. hepaticus* lacks orthologs of most known *H. pylori* virulence factors, including adhesins, the VacA cytotoxin, and almost all cag pathogenicity island proteins, but has orthologs of the *C. jejuni* adhesin PEB1 and the cytolethal distending toxin (CDT). The genome contains a 71-kb genomic island (HHGI1) and several genomic islets whose G+C content differs from the rest of the genome. HHGI1 encodes three basic components of a type IV secretion system and other virulence protein homologs, suggesting a role of HHGI1 in pathogenicity. The genomic variability of *H. hepaticus* was assessed by comparing the genomes of 12 *H. hepaticus* strains with the sequenced genome by microarray hybridization. Although five strains, including all those known to have caused liver disease, were indistinguishable from ATCC51449, other strains lacked between 85 and 229 genes, including large parts of HHGI1, demonstrating extensive variation of genome content within the species.

IT 548408-50-0, GenBank AAP77331

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(amino acid sequence; complete genome sequence of the carcinogenic bacterium *Helicobacter hepaticus*)

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2003:381903 HCAPLUS

DOCUMENT NUMBER: 138:332703

TITLE: Complete genome sequence and comparative analysis of the industrial microorganism *Streptomyces avermitilis*  
AUTHOR(S): Ikeda, Haruo; Ishikawa, Jun; Hanamoto, Akiharu; Shinose, Mayumi; Kikuchi, Hisashi; Shiba, Tadayoshi; Sakaki, Yoshiyuki; Hattori, Masahira; Omura, Satoshi  
CORPORATE SOURCE: Kitasato Institute for Life Sciences, Kitasato University, Kanagawa, 228-8555, Japan

SOURCE: Nature Biotechnology (2003), 21(5), 526-531  
CODEN: NABIF9; ISSN: 1087-0156

PUBLISHER: Nature Publishing Group

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Species of the genus *Streptomyces* are of major pharmaceutical interest because they synthesize a variety of bioactive secondary metabolites. The complete nucleotide sequence of the linear chromosome of *Streptomyces avermitilis* was detd. *S. avermitilis* produces avermectins, a group of antiparasitic agents used in human and veterinary medicine. The genome contains 9,025,608 bases (av. GC content, 70.7%) and encodes at least 7574 potential open reading frames (ORFs). Thirty-five percent of the ORFs (2664) constitute 721 paralogous families. Thirty gene clusters related to secondary metabolite biosynthesis were identified, corresponding to 6.6% of the genome. Comparison with *Streptomyces coelicolor* A3(2) revealed that an internal 6.5-Mb region in the *S. avermitilis* genome was highly conserved with respect to gene order and content, and contained all known essential genes but showed perfectly asym. structure at the *oriC* center. In contrast, the terminal regions were not conserved and preferentially contained nonessential genes. The genome and plasmid sequences are deposited in GenBank/EMBL/DBJ under accession nos. BA000030 and AP005645, resp., and in the RefSeq database under NC\_003155 and NC\_004719, resp. [This abstr. record is one of two records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

IT 508725-82-4

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL  
(Biological study)(amino acid sequence; complete genome sequence and comparative anal. of  
the industrial microorganism *Streptomyces avermitilis*)

L73 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:565222 HCAPLUS

DOCUMENT NUMBER: 135:163406

TITLE: Human nucleic acids and their encoded proteins and  
antibodies

INVENTOR(S): Rosen, Craig A.; Barash, Steven C.; Ruben, Steven M.

PATENT ASSIGNEE(S): Human Genome Sciences, Inc., USA

SOURCE: PCT Int. Appl., 673 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 90

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001055343	A1	20010802	WO 2001-US1322	20010117
W:				
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				
CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,				
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,				
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,				
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,				
YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,				
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,				
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2001041413	A5	20010807	AU 2001-41413	20010117
AU 2001041416	A5	20010807	AU 2001-41416	20010117
AU 2001041417	A5	20010807	AU 2001-41417	20010117
AU 2001050770	A5	20010807	AU 2001-50770	20010117
US 2002042096	A1	20020411	US 2001-764887	20010117
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US 2002086811	A1	20020704	US 2001-764861	20010117
US 2002086820	A1	20020704	US 2001-764862	20010117
US 2003092611	A9	20030515		
US 2002086821	A1	20020704	US 2001-764881	20010117
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US 2002090674	A1	20020711	US 2001-764903	20010117
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US 2002151479	A1	20021017	US 2001-764873	20010117
EP 1252290	A1	20021030	EP 2001-908617	20010117
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IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
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US 2003054368	A1	20030320	US 2002-79854	20020222
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US 2001-764862	A1 20010117
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US 2001-764893	B1 20010117
US 2001-764900	B1 20010117
US 2001-764903	A1 20010117
WO 2001-US1322	W 20010117

AB The present invention relates to novel connective tissue-related polynucleotides and the polypeptides encoded by these polynucleotides herein collectively known as "connective tissue antigens", and the use of such kidney antigens for detecting disorders of the connective tissues, particularly the presence of connective tissue cancer and cancer metastases. More specifically, 1193 isolated connective tissue-assocd. cDNA mols. are provided encoding novel connective tissue-assocd. polypeptides. Novel connective tissue polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human connective tissue assocd. polynucleotides and/or polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to the kidney, including kidney cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compns. for inhibiting the prodn. and function of the polypeptides of the present invention. The Sequence Listing was provided as an electronic file, but was not made available in the release of this patent.

IT **353542-70-8**, Protein (human clone HWHQB79)

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(amino acid sequence; human connective tissue-specific nucleic acids and their encoded proteins and antibodies)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1985:535323 HCAPLUS

DOCUMENT NUMBER: 103:135323

TITLE: New analogs of somatostatin with unexpected effects in vivo on insulin basal secretion in the rat (1)

AUTHOR(S): Diaz, Joseph; Cazaubon, Catherine; Demarne, Henri; Gagnol, Jean Pierre; Guegan, Remy; Muneaux, Yvette; Perreaut, Pierre; Richaud, Jean Paul; Vedel, Michel; Roncucci, Romeo

CORPORATE SOURCE: Cent. Rech., Clin-Midy/Sanofi, Montpellier, 34082, Fr.  
SOURCE: European Journal of Medicinal Chemistry (1985), 20(3), 219-27

CODEN: EJMCAS; ISSN: 0223-5234

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Twenty analogs of somatostatin were synthesized by the alternating soln./solid-phase procedure. The peptide analogs contg. taurine aza-alanine or D-amino acids as well as multiple deletions were examd. for the selective inhibition of insulin [9004-10-8] or glucagon [9007-92-5] release. The biol. activities were evaluated in vivo in the rat by measuring the effects of the modified somatostatin mols. on basal secretion of insulin and glucagon in the portal vein. Although some selective analogs were found, a few of them having a taurine or an aza-alanine residue in their structure caused an increase of insulin secretion. This unexpected phenomenon is unexplained and under investigation.

IT **89343-47-5P 89343-54-4P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and glucagon and insulin secretion response to, mol. structure in relation to)

L73 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1985:215394 HCAPLUS

DOCUMENT NUMBER: 102:215394

TITLE: Somatostatin analogs: correlation of receptor affinity with inhibition of cyclic AMP formation in pancreatic acinar cells

AUTHOR(S): Taparel, D.; Susini, C.; Esteve, J. P.; Diaz, J.; Cazaubon, C.; Vaysse, N.; Ribet, A.

CORPORATE SOURCE: INSERM, Toulouse, 31054, Fr.

SOURCE: Peptides (New York, NY, United States) (1985), 6(1), 109-14

CODEN: PPTDD5; ISSN: 0196-9781

DOCUMENT TYPE: Journal

LANGUAGE: English

GI

H-Cys-AzaAla-Phe-Phe-D-Trp-Lys-Thr-Phe-Phe-Cys-OH

I

AB Cyclic somatostatin [38916-34-6] inhibited secretin [1393-25-5]-stimulated cAMP [60-92-4] formation in pancreatic acinar cells. The inhibition was only partial. Maximal inhibition reached apprx.50%. Somatostatin analogs tested inhibited secretin-stimulated cAMP formation with a lower potency than somatostatin. I [89343-24-8] was an antagonist of somatostatin in inhibiting secretin-stimulated cAMP. Analogs inhibited the binding of 125I-labeled [Tyr11]somatostatin to pancreatic acini. There was a good correlation between concn. for inhibiting secretin-stimulated cAMP by 50% and receptor binding affinities.

IT **89343-47-5**

RL: BIOL (Biological study)

(cAMP formation inhibition by and receptor binding of, in pancreas, mol. structure in relation to)

L73 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1984:139624 HCAPLUS

DOCUMENT NUMBER: 100:139624

TITLE: Somatostatin analogs with modified biological activity and medicaments containing them

INVENTOR(S): Diaz, Joseph; Muneaux, Yvette; Roncucci, Romeo

PATENT ASSIGNEE(S): Sanofi, Fr.

SOURCE: Fr. Demande, 24 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2523125	A1	19830916	FR 1982-3852	19820308
PRIORITY APPLN. INFO.:			FR 1982-3852	19820308

OTHER SOURCE(S): CASREACT 100:139624

GI For diagram(s), see printed CA Issue.

AB Somatostatin analogs I (R = H or an amino acid or dipeptide residue; X = D- or L-Cys; X1 = Phe, D-Ala, null; X2 = L- or D-Phe or Gly; X3 = L- or D-Phe, null) and their salts were prepd. Thus, Boc-Cys(Acm)-D-Phe-Phe-D-Trp-Lys(Msc)-Thr-Phe-Phe-D-Cys(Acm)-OPse (Boc = Me3CO2C, Acm = AcNHCH2, Msc = MeSO2CH2CH2O2C, Pse = p-PhN:NC6H4CH2SO2CH2CH2) was prepd. by stepwise coupling in soln. and then it was Boc-deblocked by acidolysis and then Msc- and Pse-deblocked by base to give H-Cys(Acm)-D-Phe-Phe-D-Trp-Lys-Thr-Phe-Phe-D-Cys(Acm)-OH. The latter was Acm-deblocked by AgNO3 and then cyclized by oxidn. with K3[Fe(CN)6] to give somatostatin analog II. The insulin-, glucagon-, and growth hormone-inhibiting activities of four I were compared with those of somatostatin.

IT **89343-60-2P 89343-61-3P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. and deblocking of)

IT **89306-55-8P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. and oxidative cyclization of)

IT **89343-58-8P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. and partial deblocking of)

IT **89343-47-5P 89343-54-4P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

L73 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1984:103905 HCAPLUS

DOCUMENT NUMBER: 100:103905

TITLE: Somatostatin analogs having a hydrazide-type bond and medicaments containing them

INVENTOR(S): Perreaut, Pierre; Cazaubon, Catherine; Gagnol, Jean Pierre

PATENT ASSIGNEE(S): Sanofi, Fr.

SOURCE: Fr. Demande, 12 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2522655	A1	19830909	FR 1982-3777	19820305
FR 2522655	B1	19870306		
PRIORITY APPLN. INFO.:			FR 1982-3777	19820305

GI For diagram(s), see printed CA Issue.

AB Somatostatin hydrazide analogs I (X, X1 = A and NHA, where A = an .alpha.-amino acid residue, preferably Phe) were prepd. Thus, I (X = Phe, X1 = NH-Phe) (II) was prepd. by the solid-phase method. II inhibited the secretion of growth hormone and glucagon, but not the secretion of insulin and gastric acid, of insulin and gastric acid.

IT **88971-24-8P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and partial deblocking of)  
 IT 88985-61-9DP, resin bound  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and resin-cleavage of)

=>

=>

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 DICTIONARY FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP  
 PROPERTIES for more information. See STNote 27, Searching Properties  
 in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>

=>

=> d .seq 171 1-14

L71 ANSWER 1 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 548408-50-0 REGISTRY  
 CN INDEX NAME NOT YET ASSIGNED  
 SQL 1815

SEQ 1 MRYLCYIWKF FVFFGFIYVS TFLTACSDNK FVESYTQNIS TTPEILITFN  
 ===== ==

HITS AT: 5-12

REFERENCE 1: 139:47966

L71 ANSWER 2 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 508725-82-4 REGISTRY  
 CN Glycosyl transferase (Streptomyces avermitilis strain MA-4680) (9CI) (CA  
 INDEX NAME)

OTHER NAMES:

CN GenBank BAC74646  
 CN GenBank BAC74646 (Translated from: GenBank AP005048)  
 SQL 402

SEQ 351 ADAVASLLER PEYERRQTAR ARAECFGWKT AVDAFLAHD AGAPAPAREG  
 ===== ==

HITS AT: 375-382

REFERENCE 1: 138:332703

L71 ANSWER 3 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 486784-61-6 REGISTRY  
 CN GenBank CAA88678 (9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN GenBank CAA88678 (Translated from: GenBank Z48758)  
 SQL 453

SEQ 1 MLLIKRYLMD PESLRRQIMN VYKCYMWKRA FHSNRSLLLEV KRREKSLQRK  
 =====

HITS AT: 24-31

L71 ANSWER 4 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 353542-70-8 REGISTRY  
 CN Protein (human clone HWHQB79) (9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN 714: PN: WO0155343 SEQID: 714 claimed protein  
 NTE

type	location	description
uncommon	Aaa-10	-
uncommon	Aaa-15	-
uncommon	Aaa-16	-
uncommon	Aaa-112	-

SQL 120

SEQ 51 QKPNMSKQEK GNILWLTVMW LSLACLQRKN YNDCMLNTVI TDCYHWKNFG  
 =====

HITS AT: 93-100

REFERENCE 1: 135:163406

L71 ANSWER 5 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 89343-61-3 REGISTRY  
 CN D-Cysteine, S-[(acetylamino)methyl]-N-[N-[N-[N-[N2-[N-[N-[N-[S-  
 [(acetylamino)methyl]-L-cysteinyl]-D-phenylalanyl]-L-phenylalanyl]-D-  
 tryptophyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]-L-phenylalanyl]- (9CI)  
 (CA INDEX NAME)  
 NTE modified (modifications unspecified)

type	location	description
modification	Cys-1	(acetylamino)methyl<Acm>
modification	Cys-9	(acetylamino)methyl<Acm>

SQL 9

SEQ 1 CFFWKTFEC  
 =====

HITS AT: 1-8

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 100:139624

L71 ANSWER 6 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 89343-60-2 REGISTRY  
 CN D-Cysteine, S-[(acetylamino)methyl]-N-[N-[N-[N-[N2-[N-[N-[N-[S-  
 [(acetylamino)methyl]-L-cysteinyl]-D-phenylalanyl]-L-phenylalanyl]-D-  
 tryptophyl]-N6-[[2-(methylsulfonyl)ethoxy]carbonyl]-L-lysyl]-L-threonyl]-L-  
 phenylalanyl]-L-phenylalanyl]-, 2-[[[4-(phenylazo)phenyl]methyl]sulfonyl]e

thyl ester, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:

CN Acetic acid, trifluoro-, compd. with S-[(acetylamino)methyl]-N-[N-[N-[N-[N2-[N-[N-[N-[S-[(acetylamino)methyl]-L-cysteinyl]-D-phenylalanyl]-L-phenylalanyl]-D-tryptophyl]-N6-[[2-(methylsulfonyl)ethoxy]carbonyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]-L-phenylalanyl]-D-cysteine  
2-[[[4-(phenylazo)phenyl]methyl]sulfonyl]ethyl ester (1:1)

NTE modified (modifications unspecified)

type	location	description
modification	-	undetermined modification
modification	Cys-1	(acetylamino)methyl<Acm>
modification	Lys-5	[2-(methylsulfonyl)ethoxy]carbonyl<Msc>
modification	Cys-9	(acetylamino)methyl<Acm>

SQL 9

SEQ 1 CFFWKTFEC

HITS AT: 1-8

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

RN 89343-60-2 REGISTRY

SEQ 1 CFFWKTFEC

HITS AT: 1-8

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

SEQ 1 CFFWKTFEC

HITS AT: 1-8

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 100:139624

L71 ANSWER 7 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN

RN 89343-59-9 REGISTRY

CN D-Cysteine, S-[(acetylamino)methyl]-N-[N-[N-[N2-[N-[N-[N-[S-[(acetylamino)methyl]-L-cysteinyl]-D-phenylalanyl]-L-phenylalanyl]-D-tryptophyl]-N6-[[2-(methylsulfonyl)ethoxy]carbonyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]-L-phenylalanyl]-, 2-[[[4-(phenylazo)phenyl]methyl]sulfonyl]ethyl ester (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

type	location	description
modification	Cys-1	(acetylamino)methyl<Acm>
modification	Lys-5	[2-(methylsulfonyl)ethoxy]carbonyl<Msc>
modification	Cys-9	(acetylamino)methyl<Acm>

SQL 9

SEQ 1 CFFWKTFEC

HITS AT: 1-8

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*



L71 ANSWER 8 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN

RN 89343-58-8 REGISTRY

CN D-Cysteine, S-[(acetylamino)methyl]-N-[N-[N-[N2-[N-[N-[N-[S-  
[(acetylamino)methyl]-N-[(1,1-dimethylethoxy)carbonyl]-L-cysteiny]-D-  
phenylalanyl]-L-phenylalanyl]-D-tryptophyl]-N6-[[2-  
(methylsulfonyl)ethoxy]carbonyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]-L-  
phenylalanyl]-, 2-[[[4-(phenylazo)phenyl]methyl]sulfonyl]ethyl ester (9CI)  
(CA INDEX NAME)

NTE modified (modifications unspecified)

type	location	description
modification	Cys-1	(acetylamino)methyl<Acm>
modification	Cys-1	(1,1-dimethylethoxy) carbonyl<Boc>
modification	Lys-5	[2-(methylsulfonyl) ethoxy]carbonyl<Msc>
modification	Cys-9	(acetylamino)methyl<Acm>

SQL 9

SEQ 1 CFFWKTFEC

=====

HITS AT: 1-8

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 100:139624

L71 ANSWER 9 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN

RN 89343-54-4 REGISTRY

CN D-Cysteine, L-cysteiny-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-  
L-threonyl-L-phenylalanyl-L-phenylalanyl-, cyclic (1.fwdarw.9)-disulfide  
(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2-Dithia-5,8,11,14,17,20,23,26-octaazacyclononacosane, cyclic peptide  
deriv.

NTE

type	location	description
bridge	Cys-1 - Cys-9	disulfide bridge

SQL 9

SEQ 1 CFFWKTFEC

=====

HITS AT: 1-8

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 103:135323

REFERENCE 2: 100:139624

L71 ANSWER 10 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN

RN 89343-47-5 REGISTRY

CN D-Cysteine, L-cysteiny-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-  
L-threonyl-L-phenylalanyl-L-phenylalanyl-, cyclic (1.fwdarw.9)-disulfide  
(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2-Dithia-5,8,11,14,17,20,23,26-octaazacyclononacosane, cyclic peptide  
deriv.

NTE

type	location	description
bridge	Cys-1 - Cys-9	disulfide bridge

SQL 9

SEQ 1 CFFWKTFFC

HITS AT: 1-8

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 103:135323

REFERENCE 2: 102:215394

REFERENCE 3: 100:139624

L71 ANSWER 11 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN

RN 89306-55-8 REGISTRY

CN Argentate(1-), [.mu.-[N-[N-[N-[N2-[N-[N-[N-(N-L-cysteinyl-D-phenylalanyl)-L-phenylalanyl]-D-tryptophyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]-L-phenylalanyl]-D-cysteinato(3-)]di-, hydrogen (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN D-Cysteine, N-[N-[N-[N2-[N-[N-[N-(N-L-cysteinyl-D-phenylalanyl)-L-phenylalanyl]-D-tryptophyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]-L-phenylalanyl]-, silver complex

NTE metal complex

type	location	description
stereo	Phe-2 -	D
stereo	Trp-4 -	D
stereo	Cys-9 -	D

SQL 9

SEQ 1 CFFWKTFFC

HITS AT: 1-8

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 100:139624

L71 ANSWER 12 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN

RN 88985-61-9 REGISTRY

CN L-Cysteine, S-[(acetylamino)methyl]-N-[(1,1-dimethylethoxy)carbonyl]-L-cysteinyl-L-phenylalanyl-L-hydrazinophenylalanyl-D-tryptophyl-N6-[[2-(methylsulfonyl)ethoxy]carbonyl]-L-lysyl-L-threonyl-L-phenylalanyl-L-phenylalanyl-S-[(acetylamino)methyl]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN L-Cysteine, S-[(acetylamino)methyl]-N-[(1,1-dimethylethoxy)carbonyl]-L-cysteinyl-L-phenylalanyl-L-2-(phenylmethyl)-3-aza-.beta.-alanyl-D-tryptophyl-N6-[[2-(methylsulfonyl)ethoxy]carbonyl]-L-lysyl-L-threonyl-L-phenylalanyl-L-phenylalanyl-S-[(acetylamino)methyl]-

NTE modified (modifications unspecified)

type	location	description
uncommon	Oaa-3 -	-

stereo            Trp-4            -            D  
-----

SQL 9

SEQ            1 CFXWKTFFC  
              =====

HITS AT:      1-8

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE    1: 100:103905

L71 ANSWER 13 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN

RN 88971-24-8 REGISTRY

CN L-Cysteine, S-[(acetylamino)methyl]-L-cysteiny-L-phenylalanyl-L-  
hydrazinophenylalanyl-D-tryptophyl-N6-[[2-(methylsulfonyl)ethoxy]carbonyl]-  
L-lysyl-L-threonyl-L-phenylalanyl-L-phenylalanyl-S-[(acetylamino)methyl]-,  
methyl ester, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Acetic acid, trifluoro-, compd. with S-[(acetylamino)methyl]-L-cysteiny-L-  
phenylalanyl-L-2-(phenylmethyl)-3-aza-.beta.-alanyl-D-tryptophyl-N6-[[2-  
(methylsulfonyl)ethoxy]carbonyl]-L-lysyl-L-threonyl-L-phenylalanyl-L-  
phenylalanyl-S-[(acetylamino)methyl]-L-cysteine methyl ester (1:1)

CN L-Cysteine, S-[(acetylamino)methyl]-L-cysteiny-L-phenylalanyl-L-2-  
(phenylmethyl)-3-aza-.beta.-alanyl-D-tryptophyl-N6-[[2-  
(methylsulfonyl)ethoxy]carbonyl]-L-lysyl-L-threonyl-L-phenylalanyl-L-  
phenylalanyl-S-[(acetylamino)methyl]-, methyl ester,  
mono(trifluoroacetate) (salt)

NTE modified (modifications unspecified)

type	----- location -----	description
uncommon	Oaa-3	-
stereo	Trp-4	D

SQL 9

SEQ            1 CFXWKTFFC  
              =====

HITS AT:      1-8

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

RN 88971-24-8 REGISTRY

SEQ            1 CFXWKTFFC  
              =====

HITS AT:      1-8

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

SEQ            1 CFXWKTFFC  
              =====

HITS AT:      1-8

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE    1: 100:103905

L71 ANSWER 14 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN

RN 88971-23-7 REGISTRY

CN L-Cysteine, S-[(acetylamino)methyl]-L-cysteiny-L-phenylalanyl-L-  
hydrazinophenylalanyl-D-tryptophyl-N6-[[2-(methylsulfonyl)ethoxy]carbonyl]-  
L-lysyl-L-threonyl-L-phenylalanyl-L-phenylalanyl-S-[(acetylamino)methyl]-,

methyl ester (9CI) (CA INDEX NAME)

## OTHER CA INDEX NAMES:

CN L-Cysteine, S-[(acetylamino)methyl]-L-cysteinyl-L-phenylalanyl-L-2-(phenylmethyl)-3-aza-.beta.-alanyl-D-tryptophyl-N6-[[2-(methylsulfonyl)ethoxy]carbonyl]-L-lysyl-L-threonyl-L-phenylalanyl-L-phenylalanyl-S-[(acetylamino)methyl]-, methyl ester

NTE modified (modifications unspecified)

type	----- location -----	description	
uncommon	Oaa-3	-	-
stereo	Trp-4	-	D

SQL 9

SEQ 1 CFXWKTFFC

=====

HITS AT: 1-8

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 L22 11 SEA FILE=HCAPLUS ABB=ON PLU=ON L20  
 L23 5224 SEA FILE=REGISTRY ABB=ON PLU=ON SOMATO?  
 L24 89156 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 OR ?SOMATO?  
 L25 10 SEA FILE=HCAPLUS ABB=ON PLU=ON L22 AND L24  
 L27 467 SEA FILE=REGISTRY ABB=ON PLU=ON [FA][YAF]WK[TVSC].[GAF]/SQSP  
 L34 397 SEA FILE=REGISTRY ABB=ON PLU=ON L27 AND SQL>=7  
 L35 127 SEA FILE=REGISTRY ABB=ON PLU=ON L34 AND (CYCL? OR BRID? OR MULTICHA?)  
 L36 46 SEA FILE=HCAPLUS ABB=ON PLU=ON L35  
 L37 41 SEA FILE=HCAPLUS ABB=ON PLU=ON L36 AND L24  
 L38 41 SEA FILE=HCAPLUS ABB=ON PLU=ON L37 NOT L25  
 L40 17 SEA FILE=REGISTRY ABB=ON PLU=ON F[YF]WK[TVS].G/SQSP  
 L41 19 SEA FILE=HCAPLUS ABB=ON PLU=ON L40  
 L42 0 SEA FILE=HCAPLUS ABB=ON PLU=ON (L41 AND L24) NOT (L25 OR L38)

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 DICTIONARY FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> d .seq 140 1-17

L40 ANSWER 1 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN

RN 487165-49-1 REGISTRY

CN GenBank AAN55789 (9CI) (CA INDEX NAME)

OTHER NAMES:

CN GenBank AAN55789 (Translated from: GenBank AE015715)

SQL 271

SEQ 51 YIPNEVQRFN EKANPTYGVF LRRNGMSYHD FFWKTDGSAM NAYLESILID

=====

HITS AT: 81-87

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

L40 ANSWER 2 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN

RN 486590-37-8 REGISTRY

CN GenBank CAA48774 (9CI) (CA INDEX NAME)

OTHER NAMES:

CN GenBank CAA48774 (Translated from: GenBank X68978)

SQL 157

SEQ 51 SENCVFFWKS VGIYTDLEGK AIEQFIDVFK DQNFPPGASI LFTQSPKGS

=====

HITS AT: 56-62

L40 ANSWER 3 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN

RN 486590-04-9 REGISTRY

CN GenBank CAA48775 (9CI) (CA INDEX NAME)

OTHER NAMES:

CN GenBank CAA48775 (Translated from: GenBank X68979)

SQL 156

SEQ 51 ENCVFFWKS VGIYTDLEGK AIEQFIDAFKD QNFPPGASIL FTQSPKGS

=====

HITS AT: 55-61

L40 ANSWER 4 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN

RN 476249-60-2 REGISTRY

CN Protein (Shewanella oneidensis MR-1 strain MR-1 gene SO2763) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN GenBank AE015715-derived protein GI 24348843

SQL 271

SEQ 51 YIPNEVQRFN EKANPTYGVF LRRNGMSYHD FFWKTDGSAM NAYLESILID

=====

HITS AT: 81-87

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 138:148478

L40 ANSWER 5 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 475384-52-2 REGISTRY  
 CN Pyruvate formate-lyase activating enzyme (Bifidobacterium longum strain  
 strain NCC2705 gene BL1726) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN GenBank AAN25510  
 CN GenBank AAN25510 (Translated from: GenBank AE014806)  
 SQL 390

SEQ 201 YMSAEARPDF YAAMDAANID LKGFTEEFYW KVTGTHLADV LETIDYAVNE

=== ===

HITS AT: 228-234

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 137:364099

L40 ANSWER 6 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 443419-22-5 REGISTRY  
 CN Protein (Bifidobacterium longum strain NCC2705 open reading frame ORF3505)  
 (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 1047: PN: EP1227152 SEQID: 1048 claimed protein  
 SQL 390

SEQ 201 YMSAEARPDF YAAMDAANID LKGFTEEFYW KVTGTHLADV LETIDYAVNE

=== ===

HITS AT: 228-234

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 137:104827

L40 ANSWER 7 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 440266-09-1 REGISTRY  
 CN Protein (Chlorobium tepidum strain TLS gene CT0880) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN GenBank AAM72115  
 CN GenBank AAM72115 (Translated from: GenBank AE012854)  
 SQL 407

SEQ 151 KNGFFWKTYG NHDSDLFEER NYPLSKHLE SIRFQYGDEV MLLFHGHQAS

=====

HITS AT: 154-160

REFERENCE 1: 137:74286

L40 ANSWER 8 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 352735-88-7 REGISTRY  
 CN Lung-associated antigen (human clone HAPRG26 fragment) (9CI) (CA INDEX  
 NAME)

OTHER NAMES:

CN 154: PN: WO0155303 SEQID: 163 claimed protein  
 SQL 124

SEQ 51 TFSFFWKTYG EQSRPIPSAY GGQVISNGFK VCSSGGRGSV ELYTRDNSMT

=====

HITS AT: 54-60

REFERENCE 1: 135:163385

L40 ANSWER 9 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN

RN 299248-18-3 REGISTRY  
CN G-protein-coupled receptor BG3 (human) (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN 2: PN: W00058462 SEQID: 6 claimed protein  
SQL 874

SEQ 101 GPEGVTFSFF WKTQGEQSRP IPSAYGGQVI SNGFKVCSSG GRGSVELYTR  
== =====

HITS AT: 109-115

REFERENCE 1: 133:277841

L40 ANSWER 10 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 252845-41-3 REGISTRY  
CN .beta.-Alanine, N-(2-aminoethyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-3-(2-naphthalenyl)-L-alanyl-N-(2-amino-2-oxoethyl)-, (7.fwdarw.1)-lactam (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3203

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge	Phe-1	-	Gly-7	lactam
stereo	Trp-3	-		D

SQL 7

SEQ 1 FFWKTAG  
=====

HITS AT: 1-7

REFERENCE 1: 136:341003

REFERENCE 2: 132:50250

L40 ANSWER 11 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 252845-40-2 REGISTRY  
CN .beta.-Alanine, N-(2-aminoethyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-seryl-3-(2-naphthalenyl)-L-alanyl-N-(2-amino-2-oxoethyl)-, (7.fwdarw.1)-lactam (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3201

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge	Phe-1	-	Gly-7	lactam
stereo	Trp-3	-		D

SQL 7

SEQ 1 FYWKSAG  
=====

HITS AT: 1-7

REFERENCE 1: 136:341003

REFERENCE 2: 132:50250

L40 ANSWER 12 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 204388-06-7 REGISTRY  
CN Cyclo(L-asparaginyl-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-



threonyl-L-phenylalanylglycyl) (9CI) (CA INDEX NAME)

## OTHER NAMES:

CN 86: PN: US20020042374 PAGE: 10 claimed protein

CN 90: PN: US6268342 SEQID: 96 claimed protein

NTE cyclic

SQL 8

SEQ 1 NFFWKTFG

=====

HITS AT: 2-8

## \*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 137:295256

REFERENCE 2: 136:304089

REFERENCE 3: 135:132468

REFERENCE 4: 131:295567

REFERENCE 5: 130:20992

REFERENCE 6: 130:20991

REFERENCE 7: 128:226683

L40 ANSWER 13 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN

RN 183971-53-1 REGISTRY

CN Protein (Caenorhabditis elegans clone B0334 potassium channel-forming)  
(9CI) (CA INDEX NAME)

## OTHER NAMES:

CN B0334 potassium channel (Caenorhabditis elegans clone B0334 4TM)

CN GenBank Z66519-derived protein GI 1089818

SQL 290

SEQ 101 LGNFGKYLTK FYWKTHGWIF SERTSESELVN DKDMPGIVIA CLYLLTFAIG

=====

HITS AT: 111-117

REFERENCE 1: 126:2241

L40 ANSWER 14 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN

RN 161889-28-7 REGISTRY

CN L-Cysteinamide, N6-[N-[N-[N-[N-[N2-[N-[N-[N-(N-acetyl-D-phenylalanyl)-L-phenylalanyl]-L-tyrosyl]-D-tryptophyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]glycyl]glycyl]glycyl]-L-lysyl-L-lysyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

type	-----	location	-----	description
uncommon		Oaa-11	-	-
stereo		Phe-1	-	D
stereo		Trp-4	-	D

SQL 13

SEQ 1 FFYWKTFGGG XKC

=====

HITS AT: 2-8

REFERENCE 1: 124:49695

L40 ANSWER 15 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 150243-71-3 REGISTRY  
CN L-Proline, L-seryl-L-.alpha.-glutamyl-L-threonyl-L-tyrosyl-L-leucyl-L-leucyl-L-phenylalanyl-L-phenylalanyl-L-tryptophyl-L-lysyl-L-threonyl-L-histidylglycyl-L-threonyl-L-lysyl-L-asparaginyl-L-tyrosyl-L-phenylalanyl-(9CI) (CA INDEX NAME)  
SQL 19

SEQ 1 SETYLLFFWK THGTKNYFP  
=====

HITS AT: 7-13

REFERENCE 1: 119:178972

L40 ANSWER 16 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 72127-64-1 REGISTRY  
CN Cyclo[L-asparaginyl-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-N6-[(1,1-dimethylethoxy)carbonyl]-L-lysyl-O-(1,1-dimethylethyl)-L-threonyl-L-phenylalanylglycyl] (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,4,7,10,13,16,19,22-Octaazacyclotetracosane, cyclic peptide deriv.

CN Cyclic[L-asparaginyl-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-N6-[(1,1-dimethylethoxy)carbonyl]-L-lysyl-O-(1,1-dimethylethyl)-L-threonyl-L-phenylalanylglycyl]

NTE cyclic

modified (modifications unspecified)

type	location	description
modification	Lys-5	(1,1-dimethylethoxy) carbonyl<Boc>
modification	Thr-6	1,1-dimethylethyl<t-Bu>

SQL 8

SEQ 1 NFFWKTFG  
=====

HITS AT: 2-8

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 92:6946

L40 ANSWER 17 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 72127-62-9 REGISTRY  
CN Cyclo(glycyl-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,4,7,10,13,16,19-Heptaazacycloheptacosane, cyclic peptide deriv.

CN Cyclic(glycyl-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl)

OTHER NAMES:

CN 84: PN: US20020042374 PAGE: 10 claimed protein

CN 88: PN: US6268342 SEQID: 94 claimed protein

NTE cyclic

SQL 7

SEQ 1 GFFWKTF  
=====

HITS AT: 1, 2-7

REFERENCE 1: 137:295256

REFERENCE 2: 136:304089

REFERENCE 3: 135:132468  
REFERENCE 4: 131:295567  
REFERENCE 5: 130:20992  
REFERENCE 6: 130:20991  
REFERENCE 7: 128:226683  
REFERENCE 8: 92:6946

=> fil hcaplus  
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FILE COVERS 1907 - 22 Jul 2003 VOL 139 ISS 4  
FILE LAST UPDATED: 21 Jul 2003 (20030721/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> d stat que 138  
L20 42 SEA FILE=REGISTRY ABB=ON PLU=ON FWKTFG/SQSP  
L22 11 SEA FILE=HCAPLUS ABB=ON PLU=ON L20  
L23 5224 SEA FILE=REGISTRY ABB=ON PLU=ON SOMATO?  
L24 89156 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 OR ?SOMATO?  
L25 10 SEA FILE=HCAPLUS ABB=ON PLU=ON L22 AND L24  
L27 467 SEA FILE=REGISTRY ABB=ON PLU=ON [FA][YAF]WK[TVSC].[GAF]/SQSP  
  
L34 397 SEA FILE=REGISTRY ABB=ON PLU=ON L27 AND SQL>=7  
L35 127 SEA FILE=REGISTRY ABB=ON PLU=ON L34 AND (CYCL? OR BRID? OR MULTICHA? )  
  
L36 46 SEA FILE=HCAPLUS ABB=ON PLU=ON L35  
L37 41 SEA FILE=HCAPLUS ABB=ON PLU=ON L36 AND L24  
L38 41 SEA FILE=HCAPLUS ABB=ON PLU=ON L37 NOT L25

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=>  
  
=> d ibib abs hitrn 138 1-41  
  
L38 ANSWER 1 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 2002:793646 HCAPLUS  
DOCUMENT NUMBER: 137:295256  
TITLE: Preparation of cyclic peptides as **somatostatin** agonists  
INVENTOR(S): Coy, David H.; Rajeswaran, Walajapet G.  
PATENT ASSIGNEE(S): The Administrators of the Tulane Educational Fund, USA  
SOURCE: PCT Int. Appl., 43 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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 WO 2002081499      A2      20021017      WO 2002-US10882      20020408  
 WO 2002081499      A3      20030508

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,  
 UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,  
 TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,  
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 2001-282526P P 20010409

OTHER SOURCE(S):

MARPAT 137:295256

AB The invention is directed to cyclic peptides A1-cyclo[Cys-A2-D-Trp-A3-A4-Cys]-A5-Y1 [A1 is an optionally-substituted D- or L-arom. .alpha.-amino acid or D- or L-cyclo(C3-6)alkylalanine; A2 is an optionally-substituted arom. .alpha.-amino acid or cyclo(C3-6)alkylalanine; A3 is Lys or Orn; A4, A5 = .beta.-hydroxyvaline, Ser, hSer, or Thr; Y1 is OH, NH2 or alkylamino; the substituent on the arom. .vsigma.-amino acid or cyclo(C3-6)alkylalanine is selected from halogen, NO2, OH, CN, alkyl, alkenyl, alkynyl, alkoxy, Bzl, O-Bzl, or an amino group; the amine nitrogen of each amide peptide bond and the amino group of A1 is optionally substituted with a Me group (there is at least one Me group)] and their pharmaceutically-acceptable salts for use as **somatostatin** agonists. The solid-phase method was applied to the synthesis of 18 cyclic peptides of the invention, including NMe-D-Phe-cyclo[Cys-Phe-D-Trp-Lys-Thr-Cys]-Thr-NH2 (1). Peptide 1 showed binding affinities Kd for cloned human sst1-5 receptors of 316 .+- 11, 1.03 .+- 0.26, 17.9 .+- 2.5, >1.000, and 4.89 .+- 1.4 nM, resp., and agonist activity IC50 = 0.32 .+- 0.13 nM on culture rat pituitary cells.

IT 9002-62-4, Prolactin, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (hyperprolactinemia; prepn. of cyclic peptides as **somatostatin** agonists)

IT 51110-01-1, **Somatostatin**

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (prepn. of cyclic peptides as **somatostatin** agonists)

IT 72127-62-9DP, N-Me derivs. 76587-47-8DP, N-Me derivs.  
 76587-65-0DP, N-Me derivs. 76587-78-5DP, N-Me derivs.  
 79775-25-0DP, N-Me derivs. 79814-97-4DP, N-Me derivs.  
 204388-06-7DP, N-Me derivs. 204388-11-4DP, N-Me derivs.  
 216259-60-8DP, N-Me derivs..

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU  
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
 (Uses)

(prepn. of cyclic peptides as **somatostatin** agonists)

L38 ANSWER 2 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:276518 HCAPLUS

DOCUMENT NUMBER: 136:304089

TITLE: Method of treating insulin insensitivity and syndrome  
 X

INVENTOR(S): Cawthorne, Michael Anthony; Liu, Yong-ling; Sennitt,  
 Matthew V.

PATENT ASSIGNEE(S): UK

SOURCE: U.S. Pat. Appl. Publ., 15 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002042374	A1	20020411	US 1998-76948	19980513
PRIORITY APPLN. INFO.:			US 1997-46373P	P 19970513
OTHER SOURCE(S): MARPAT 136:304089				
AB The present invention relates to a method of treating insulin resistance or syndrome X in a patient. The method includes the step of administering a therapeutically effective amt. of a <b>somatostatin</b> or a <b>somatostatin</b> agonist to said patient. Among examples provided are: binding of several <b>somatostatin</b> agonists to human <b>somatostatin</b> receptors, improvement of insulin sensitivity in BIM-23268-treated fatty Zucker rats, and redn. of hypertriglyceridemia by BIM-23268C in obese Zucker rats.				
IT 51110-01-1, <b>Somatostatin</b> -14 75037-27-3, <b>Somatostatin</b> -28				
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)				
(somatostatin and somatostatin agonists in treatment of insulin insensitivity and syndrome X)				
IT 72127-62-9 76587-47-8 76587-65-0				
76587-78-5 79775-25-0 79814-97-4				
204388-06-7 204388-11-4 216259-60-8				
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)				
(somatostatin and somatostatin agonists in treatment of insulin insensitivity and syndrome X)				
L38 ANSWER 3 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN				
ACCESSION NUMBER: 2001:560059 HCAPLUS				
DOCUMENT NUMBER: 135:132468				
TITLE: Method of inhibiting fibrosis with a <b>somatostatin</b> or <b>somatostatin</b> agonist				
INVENTOR(S): Culler, Michael D.; Kasprzyk, Philip G.				
PATENT ASSIGNEE(S): Biomeasure Inc., USA				
SOURCE: U.S., 16 pp., Cont.-in-part of U.S. Ser. No. 705,790, abandoned.				
CODEN: USXXAM				
DOCUMENT TYPE: Patent				
LANGUAGE: English				
FAMILY ACC. NUM. COUNT: 3				
PATENT INFORMATION:				

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6268342	B1	20010731	US 1999-254097	19990510
WO 9808529	A1	19980305	WO 1997-US14154	19970827
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 2001011072	A1	20010802	US 2001-761605	20010116
PRIORITY APPLN. INFO.:			US 1996-705790	B2 19960830
			WO 1997-US14154	W 19970827
			US 1999-254097	A3 19990510
OTHER SOURCE(S): MARPAT 135:132468				
AB The invention discloses a method of inhibiting fibrosis in a patient. The method comprises administering a therapeutically effective amt. of a <b>somatostatin</b> , a <b>somatostatin</b> agonist, or a pharmaceutically acceptable salt thereof, to the patient.				

IT 51110-01-1, Somatostatin 72127-62-9  
 75037-27-3, Somatostatin-28 76587-47-8  
 76587-65-0 76587-78-5 79775-25-0  
 79814-97-4 204388-06-7 204388-11-4  
 216259-60-8

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(somatostatin or somatostatin agonist for fibrosis inhibition)

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 4 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:255846 HCAPLUS

DOCUMENT NUMBER: 134:300763

TITLE: Somatostatin analogs

INVENTOR(S): Dean, Richard T.

PATENT ASSIGNEE(S): Diatide, Inc., USA

SOURCE: U.S., 16 pp., Cont.-in-part of U.S. 6,017,509.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 44

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6214316	B1	20010410	US 1999-420865	19991019
US 6017509	A	20000125	US 1993-92355	19930715
PRIORITY APPLN. INFO.:			US 1993-92355	A2 19930715
			US 1991-807062	A2 19911127

OTHER SOURCE(S): MARPAT 134:300763

AB This invention relates to therapeutic reagents and peptides, including radiotherapeutic reagents and peptides, radiodiagnostic reagents and peptides, and methods for producing labeled radiodiagnostic agents. Specifically, the invention relates to cyclic peptide derivs. and analogs of **somatostatin**, and embodiments of such peptides radiolabeled with a radioisotope, as well as methods and kits for making, radiolabeling and using such peptides for radiodiagnostic and radiotherapeutic purposes. The invention specifically relates to cyclic peptide derivs. and analogs of **somatostatin** radiolabeled with technetium-99m and uses thereof as scintigraphic imaging agents. The invention also specifically relates to cyclic peptide derivs. and analogs of **somatostatin** radiolabeled with cytotoxic radioisotopes such as rhenium-186 ( 186 Re) and rhenium-188 ( 188 Re) for use as radiotherapeutic agents. Methods and kits for making, radiolabeling and using such peptides diagnostically and therapeutically in a mammalian body are also provided.

IT 161982-27-0P 161982-28-1P 161982-29-2P  
 161982-30-5P 161982-32-7P

RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
 (radiolabeled **somatostatin** analogs)

IT 161982-29-2D, rhenium complex

RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
 (radiolabeled **somatostatin** analogs)

IT 51110-01-1D, Somatostatin, radiolabeled analogs

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (radiolabeled **somatostatin** analogs)

IT 40958-31-4, Somatostatin (sheep reduced)

RL: PRP (Properties)

(unclaimed sequence; **somatostatin** analogs)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 5 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 2001:91402 HCAPLUS  
 DOCUMENT NUMBER: 134:152627  
 TITLE: **Somatostatin** analogs  
 INVENTOR(S): Dean, Richard T.; Lister-James, John  
 PATENT ASSIGNEE(S): Diatide, Inc., USA  
 SOURCE: U.S., 17 pp., Cont.-in-part of U.S. 6,017,509.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 44  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6183722	B1	20010206	US 1999-420866	19991019
US 5443815	A	19950822	US 1991-807062	19911127
US 6017509	A	20000125	US 1993-92355	19930715
PRIORITY APPLN. INFO.:			US 1991-807062	A2 19911127
			US 1993-92355	A2 19930715

OTHER SOURCE(S): MARPAT 134:152627

AB This invention relates to therapeutic reagents and peptides, including radiotherapeutic reagents and peptides, radiodiagnostic reagents and peptides, and methods for producing labeled radiodiagnostic agents. Specifically, the invention relates to cyclic peptide derivs. and analogs of **somatostatin**, and embodiments of such peptides radiolabeled with a radioisotope, as well as methods and kits for making, radiolabeling and using such peptides for radiodiagnostic and radiotherapeutic purposes. The invention specifically relates to cyclic peptide derivs. and analogs of **somatostatin** radiolabeled with technetium-99m and uses thereof as scintigraphic imaging agents. The invention also specifically relates to cyclic peptide derivs. and analogs of **somatostatin** radiolabeled with cytotoxic radioisotopes such as rhenium-186 (186 Re) and rhenium-188 (188 Re) for use as radiotherapeutic agents. Methods and kits for making, radiolabeling and using such peptides diagnostically and therapeutically in a mammalian body are also provided.

IT 161982-27-0D, rhenium complex 161982-30-5D, rhenium complex

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(radiolabeled **somatostatin** analogs for radiodiagnosis and radiotherapy: receptor binding)

IT 161982-27-0P 161982-28-1P 161982-29-2P  
161982-30-5P 161982-32-7P

RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)

(reagents and kits for prepg. radiolabeled **somatostatin** analogs for radiodiagnosis and radiotherapy)

IT 51110-01-1D, **Somatostatin**, analogs, radiolabeled complexes

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(reagents and kits for prepg. radiolabeled **somatostatin** analogs for radiodiagnosis and radiotherapy)

IT 40958-31-4, **Somatostatin** (sheep reduced)

RL: PRP (Properties)

(unclaimed sequence; **somatostatin** analogs)

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



L38 ANSWER 6 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:66743 HCAPLUS

DOCUMENT NUMBER: 132:119359

TITLE: Radiolabeled **somatostatin** receptor-binding peptides

INVENTOR(S): Dean, Richard T.; McBride, William; Lister-James, John

PATENT ASSIGNEE(S): Diatide, Inc., USA

SOURCE: U.S., 18 pp., Cont.-in-part of U.S. 5,443,815.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 44

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6017509	A	20000125	US 1993-92355	19930715
US 5443815	A	19950822	US 1991-807062	19911127
ES 2172513	T3	20021001	ES 1993-901469	19921119
ZA 9307504	A	19940804	ZA 1993-7504	19931011
CA 2347670	AA	19950105	CA 1994-2347670	19940603
WO 9500553	A1	19950105	WO 1994-US6274	19940603
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9470990	A1	19950117	AU 1994-70990	19940603
AU 701083	B2	19990121		
EP 720621	A1	19960710	EP 1994-920076	19940603
EP 720621	B1	20010207		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, SE				
US 5997844	A	19991207	US 1994-253678	19940603
AT 199089	E	20010215	AT 1994-920076	19940603
EP 1092726	A2	20010418	EP 2000-122241	19940603
EP 1092726	A3	20020109		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, IE				
EP 1099707	A2	20010516	EP 2000-122242	19940603
EP 1099707	A3	20020109		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, IE				
CA 2167281	C	20010904	CA 1994-2167281	19940603
ES 2158897	T3	20010916	ES 1994-920076	19940603
SG 90060	A1	20020723	SG 1999-3785	19940603
US 5807537	A	19980915	US 1995-462212	19950605
US 5814297	A	19980929	US 1995-471741	19950606
US 6074627	A	20000613	US 1996-582134	19960514
AU 9734151	A1	19971106	AU 1997-34151	19970813
AU 721198	B2	20000629		
US 6017512	A	20000125	US 1997-931095	19970915
US 6183722	B1	20010206	US 1999-420866	19991019
US 6214316	B1	20010410	US 1999-420865	19991019
PRIORITY APPLN. INFO.:			US 1991-807062	A2 19911127
			US 1991-653012	B2 19910208
			US 1992-902935	A2 19920623
			WO 1993-US6029	W 19930623
			US 1993-92355	A 19930715
			CA 1994-2167281	A3 19940603
			EP 1994-920076	A 19940603
			US 1994-253678	A3 19940603
			WO 1994-US6274	W 19940603

AB This invention relates to therapeutic reagents and peptides, including radiotherapeutic reagents and peptides, radiodiagnostic reagents and peptides, and methods for producing labeled radiodiagnostic agents. Specifically, the invention relates to cyclic peptide derivs. and analogs of **somatostatin**, and embodiments of such peptides radiolabeled

with a radioisotope, as well as methods and kits for making, radiolabeling and using such peptides for radiodiagnostic and radiotherapeutic purposes. The invention specifically relates to cyclic peptide derivs. and analogs of **somatostatin** radiolabeled with technetium-99m and uses thereof as scintigraphic imaging agents. The invention also specifically relates to cyclic peptide derivs. and analogs of **somatostatin** radiolabeled with cytotoxic radioisotopes such as rhenium-186 (186Re) and rhenium-188 (188Re) for use as radiotherapeutic agents. Methods and kits for making, radiolabeling and using such peptides diagnostically and therapeutically in a mammalian body are also provided.

IT **51110-01-1D, Somatostatin**, radiolabeled  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (radiolabeled **somatostatin** receptor-binding peptides)

IT **161982-27-0P 161982-28-1P 161982-29-2P 161982-30-5P 161982-32-7P 177788-58-8P**  
 RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
 (radiolabeled **somatostatin** receptor-binding peptides)

IT **51110-01-1D, Somatostatin**, radiolabeled analogs  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (radiolabeled **somatostatin** receptor-binding peptides)

REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 7 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1999:780311 HCAPLUS  
 DOCUMENT NUMBER: 132:20545  
 TITLE: Technetium-99m labeled peptides for imaging  
 INVENTOR(S): Dean, Richard T.; Buttram, Scott; McBride, William; Lister-James, John; Civitello, Edgar R.  
 PATENT ASSIGNEE(S): Diatide, Inc., USA  
 SOURCE: U.S., 23 pp., Cont.-in-part of U.S. Ser. No. 653,012, abandoned.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 44  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5997844	A	19991207	US 1994-253678	19940603
US 6017509	A	20000125	US 1993-92355	19930715
US 5989519	A	19991123	US 1994-290853	19941011
CA 2191950	AA	19951214	CA 1995-2191950	19950601
WO 9533498	A1	19951214	WO 1995-US7017	19950601
W: AU, BR, CA, CN, JP, KR				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9527783	A1	19960104	AU 1995-27783	19950601
AU 697048	B2	19980924		
EP 762901	A1	19970319	EP 1995-922946	19950601
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CN 1154072	A	19970709	CN 1995-194335	19950601
CN 1090973	B	20020918		
JP 10501241	T2	19980203	JP 1995-501223	19950601
ZA 9504547	A	19960124	ZA 1995-4547	19950602
US 5681541	A	19971028	US 1995-464456	19950605
US 5788960	A	19980804	US 1995-463052	19950605
US 6074627	A	20000613	US 1996-582134	19960514
US 5997845	A	19991207	US 1997-902367	19970729
PRIORITY APPLN. INFO.:			US 1991-653012	B2 19910208

US 1993-92355	A2 19930715
US 1991-807062	A2 19911127
US 1992-851074	B2 19920313
US 1992-886752	B1 19920521
US 1992-893981	A3 19920605
WO 1993-US2320	W 19930312
US 1993-44825	B1 19930408
US 1994-253678	A2 19940603
US 1994-263758	A3 19940622
US 1994-273274	A2 19940711
US 1995-439905	A3 19950512
WO 1995-US7017	W 19950601
US 1995-462668	B1 19950605
US 1995-469858	A 19950606

OTHER SOURCE(S): MARPAT 132:20545

AB This invention relates to radiolabeled peptides and methods for producing such peptides. Specifically, the invention relates to peptides, methods and kits for making such peptides, and methods for using such peptides to image sites in a mammalian body labeled with technetium-99m (Tc-99m) via a radiolabel-binding moiety covalently attached to a specific binding peptide via an amino acid side-chain of the peptide.

IT **161982-57-6DP**, 99mTc-labeled **161982-59-8DP**, 99mTc-labeled **172485-52-8DP**, 99mTc-labeled **172485-58-4DP**, 99mTc-labeled

RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
(technetium-99m labeled peptides for imaging)

IT **161889-37-8DP**, 99mTc-labeled

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(technetium-99m labeled peptides for imaging)

REFERENCE COUNT: 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 8 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:704836 HCAPLUS

DOCUMENT NUMBER: 131:327610

TITLE: Labeled **somatostatin** analogs for imaging  
cardiovascular disease

INVENTOR(S): Dean, Richard T.; Lister-James, John

PATENT ASSIGNEE(S): Diatide, Inc., USA

SOURCE: U.S., 6 pp., Cont.-in-part of U.S. Ser. No. 253,973.  
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 44

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5976496	A	19991102	US 1997-976995	19971124
CA 2191951	AA	19951214	CA 1995-2191951	19950601
CN 1158090	A	19970827	CN 1995-194356	19950601
CN 1093424	B	20021030		
ZA 9504548	A	19960315	ZA 1995-4548	19950602

PRIORITY APPLN. INFO.: US 1994-253973 A2 19940603

AB The invention provides methods and kits for detecting cardiovascular disease in a living mammal, using a labeled form of a **somatostatin** analog. Suitable labels are <sup>123</sup>I, <sup>67</sup>Ga, <sup>111</sup>In and <sup>99m</sup>Tc. The methods and kits of the invention provide early detection of atherosclerotic plaque, in particular, unstable atherosclerotic plaque, thus allowing therapeutic intervention prior to acute and potentially fatal incidents of

cardiovascular disease. Thus, localization and in-vivo imaging of atherosclerotic plaques was carried out in hypercholesteremic rabbits using Tc-99m-labeled **somatostatin** analogs.

- IT **38916-34-6D, Somatostatin**, analogs, labeled  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (agents for imaging cardiovascular disease)
- IT **161889-37-8D**, labeled **161982-27-0D**, labeled  
**161982-28-1D**, labeled **161982-30-5D**, labeled  
**161982-55-4D**, labeled **161982-57-6D**, labeled  
**161982-58-7D**, labeled **161982-59-8D**, labeled  
**161982-60-1D**, labeled **174350-62-0D**, labeled  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (**somatostatin** analog for imaging cardiovascular disease)
- REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 9 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:670109 HCAPLUS  
 DOCUMENT NUMBER: 131:295567  
 TITLE: Inhibition of Helicobacter pylori proliferation  
 INVENTOR(S): Kaneko, Hiroshi; Mitsuma, Terunori; Yamashita, Koichi;  
 Morgan, Barry  
 PATENT ASSIGNEE(S): Biomeasure, Inc., USA  
 SOURCE: U.S., 19 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5968903	A	19991019	US 1998-74117	19980507
WO 9956769	A2	19991111	WO 1999-US10058	19990506
WO 9956769	A3	20001109		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9939754	A1	19991123	AU 1999-39754	19990506
EP 1075273	A2	20010214	EP 1999-922851	19990506
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
JP 2002513769	T2	20020514	JP 2000-546793	19990506
NO 2000005588	A	20010105	NO 2000-5588	20001106
PRIORITY APPLN. INFO.:				
			US 1998-74117	A1 19980507
			WO 1999-US10058	W 19990506

OTHER SOURCE(S): MARPAT 131:295567

AB The present invention is directed to a method of using **somatostatin** or a **somatostatin** agonist to inhibit the proliferation of Helicobacter pylori (H. pylori), which comprises administering to a patient in need thereof an effective amt. of said **somatostatin** or **somatostatin** agonist. Preferably, a **somatostatin** sub-type receptor 2 (SSTR-2) selective **somatostatin** agonist is administered in a method of this invention. The inhibition of H. pylori proliferation is useful in treating various gastroduodenal diseases such as peptic ulcers, gastric cancer and gastric lymphoma.

IT **51110-01-1, Somatostatin**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(agonists; inhibition of *Helicobacter pylori* proliferation with **somatostatin** or a **somatostatin** agonist)

IT 72127-62-9 79775-25-0 79814-97-4  
95244-38-5 204388-06-7 204388-11-4

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(inhibition of *Helicobacter pylori* proliferation with **somatostatin** or a **somatostatin** agonist)

REFERENCE COUNT: 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 10 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:764305 HCAPLUS

DOCUMENT NUMBER: 130:20992

TITLE: **Somatostatin** and **somatostatin** agonists for treating insulin insensitivity and Syndrome X

INVENTOR(S): Cawthorne, Michael Anthony; Liu, Yong-Ling; Sennitt, Matthew V.

PATENT ASSIGNEE(S): Societe De Conseils De Recherches Et D'Applications Scientifiques S.A. (S.C., Fr.

SOURCE: PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9851332	A1	19981119	WO 1998-EP3000	19980513
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9880198	A1	19981208	AU 1998-80198	19980513
EP 980253	A1	20000223	EP 1998-928308	19980513
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			

PRIORITY APPLN. INFO.: US 1997-854943 19970513  
WO 1998-EP3000 19980513

OTHER SOURCE(S): MARPAT 130:20992

AB The present invention relates to a method of treating insulin resistance or Syndrome X. The method includes the step of administering a therapeutically effective amt. of a **somatostatin** or a **somatostatin** agonist to said patient. The invention also includes pharmaceutical compns. comprising a **somatostatin** or **somatostatin** agonist and the use of such products in the prepn. of such compns.

IT 51110-01-1, **Somatostatin** 72127-62-9  
76587-47-8 76587-65-0 76587-78-5  
79775-25-0 79814-97-4 204388-06-7  
204388-11-4 216259-60-8

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(Uses)

(somatostatin and somatostatin agonists for treating insulin insensitivity and Syndrome X)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 11 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:764304 HCAPLUS

DOCUMENT NUMBER: 130:20991

TITLE: Somatostatin and somatostatin agonists for decreasing body weight

INVENTOR(S): Cawthorne, Michael Anthony; Liu, Yong-Ling; Sennitt, Matthew V.

PATENT ASSIGNEE(S): Societe De Conseils De Recherches Et D'Applications Scientifiques S.A. (S.C., Fr.

SOURCE: PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9851331	A1	19981119	WO 1998-EP2999	19980513
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9876550	A1	19981208	AU 1998-76550	19980513
EP 981363	A1	20000301	EP 1998-924317	19980513
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			

PRIORITY APPLN. INFO.: US 1997-854941 19970513  
WO 1998-EP2999 19980513

OTHER SOURCE(S): MARPAT 130:20991

AB The present invention relates to a method of decreasing body wt. in a patient. The method includes the step of administering a therapeutically effective amt. of a **somatostatin** or a **somatostatin** agonist to said patient. A pharmaceutical/cosmetic compn. comprises the **somatostatin** or **somatostatin** agonist. Such products are used to prep. such compns. for the redn. of body wt. in a human or mammalian animal.

IT 51110-01-1, Somatostatin 72127-62-9

76587-47-8 76587-65-0 76587-78-5

79775-25-0 79814-97-4 204388-06-7

204388-11-4 216259-60-8

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(somatostatin and somatostatin agonists for decreasing body wt.)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 12 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

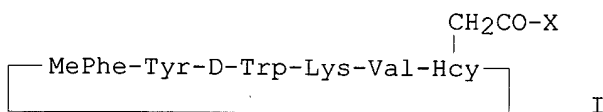
ACCESSION NUMBER: 1998:490443 HCAPLUS

DOCUMENT NUMBER: 129:136495

TITLE: Preparation of somatostatin

INVENTOR(S): cyclopeptide-radiometal chelate conjugates  
 Dean, Richard T.  
 PATENT ASSIGNEE(S): Diatide, Inc., USA  
 SOURCE: U.S., 17 pp., Cont.-in-part of U.S. 5,433,815.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 44  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5783170	A	19980721	US 1994-241625	19940512
US 5443815	A	19950822	US 1991-807062	19911127
ES 2172513	T3	20021001	ES 1993-901469	19921119
ZA 9307504	A	19940804	ZA 1993-7504	19931011
CA 2190108	AA	19951123	CA 1995-2190108	19950512
WO 9531221	A1	19951123	WO 1995-US6034	19950512
W: AU, CA, CN, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9525500	A1	19951205	AU 1995-25500	19950512
AU 708797	B2	19990812		
ZA 9503878	A	19960118	ZA 1995-3878	19950512
EP 759786	A1	19970305	EP 1995-919827	19950512
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CN 1155248	A	19970723	CN 1995-193841	19950512
CN 1078480	B	20020130		
JP 10500411	T2	19980113	JP 1995-529821	19950512
US 5807537	A	19980915	US 1995-462212	19950605
US 5814297	A	19980929	US 1995-471741	19950606
AU 9734151	A1	19971106	AU 1997-34151	19970813
AU 721198	B2	20000629		
US 5965108	A	19991012	US 1998-39062	19980313
US 5972308	A	19991026	US 1998-42224	19980313
US 5981477	A	19991109	US 1998-39116	19980313
US 5985241	A	19991116	US 1998-42315	19980313
PRIORITY APPLN. INFO.:			US 1991-807062	A2 19911127
			US 1994-241625	A 19940512
			WO 1995-US6034	W 19950512
OTHER SOURCE(S):		MARPAT 129:136495		
GI				



AB This invention relates to **somatostatin** analog cyclopeptides I [X = metal ion complexing moiety (AA)n-B-(AA)m-Z; B = Cys, homocysteine (Hcy), penicillamine; AA = independently any .alpha.- or .beta.-amino acid that does not contain a thiol group; Z = OH, NH<sub>2</sub>; n = 2-5; m = 0-5] as diagnostic and radiodiagnostic agents, including radiolabeled scintigraphic imaging agents, and therapeutic and radiotherapeutic agents. The invention provides such agents and reagents for prep. such agents, and methods for producing and using such reagents. Specifically, the invention provides radiolabeled imaging agents and non-radioactively labeled imaging agents for imaging sites in a mammalian body and reagents for prep. these imaging agents. The invention also provides radiolabeled therapeutic agents, as well as non-radioactively labeled therapeutic agents, and reagents and methods for prep. these agents. The agents and

reagents provided comprise a specific binding peptide, covalently linked to a metal ion-complexing moiety. Reagents, methods and kits for making such reagents, methods for labeling such reagents, and methods for using such labeled reagents are provided. Thus, cyclopeptides I (X = Gly-Gly-Cys-R; R = H, Lys-NH<sub>2</sub>, Arg-NH<sub>2</sub>, Orn-NH<sub>2</sub>, Arg-Lys-NH<sub>2</sub>, Lys-Lys-NH<sub>2</sub>) were prep'd. by sold. couplings and complexes with technetium-99m to give the corresponding radionuclide complexes.

IT 161889-37-8DP, complexes with technetium-99m 161982-57-6DP  
 , complexes with technetium-99m 161982-59-8DP, complexes with  
 technetium-99m 172485-51-7P 172485-52-8DP, complexes  
 with technetium-99m 172485-53-9P 172485-58-4DP,  
 complexes with technetium-99m  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
 study, unclassified); SPN (Synthetic preparation); BIOL (Biological  
 study); PREP (Preparation)

(prepn. of **somatostatin** cyclopeptide-radiometal chelate  
 conjugates)

IT 161889-37-8P 161982-57-6P 161982-59-8P  
 172485-52-8P 172485-58-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(prepn. of **somatostatin** cyclopeptide-radiometal chelate  
 conjugates)

REFERENCE COUNT: 88 THERE ARE 88 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 13 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:163467 HCAPLUS

DOCUMENT NUMBER: 128:226683

TITLE: Method of inhibiting fibrosis with a  
**somatostatin** agonist

INVENTOR(S): Culler, Michael D.; Kasprzyk, Philip G.

PATENT ASSIGNEE(S): Biomeasure Incorporated, USA; Culler, Michael D.;  
 Kasprzyk, Philip G.

SOURCE: PCT Int. Appl., 61 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9808529	A1	19980305	WO 1997-US14154	19970827
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9741490	A1	19980319	AU 1997-41490	19970827
AU 726731	B2	20001116		
EP 938328	A1	19990901	EP 1997-939392	19970827
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
CN 1229357	A	19990922	CN 1997-197671	19970827
JP 2001500483	T2	20010116	JP 1998-511678	19970827
ZA 9707783	A	19990301	ZA 1997-7783	19970829
US 6268342	B1	20010731	US 1999-254097	19990510
PRIORITY APPLN. INFO.:			US 1996-705790 A2	19960830
			WO 1997-US14154 W	19970827



OTHER SOURCE(S): MARPAT 128:226683

AB The present invention relates to a method of inhibiting fibrosis in a patient. The method comprises administering a therapeutically effective amt. of a **somatostatin**, a **somatostatin** agonist or a pharmaceutically acceptable salt thereof to said patient.

IT 95244-38-5

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(demethod of inhibiting fibrosis with a **somatostatin** agonist)

IT 51110-01-1, **Somatostatin**-14 72127-62-975037-27-3, **Somatostatin**-28 76587-47-8

76587-65-0 76587-78-5 79775-25-0

79814-97-4 204388-06-7 204388-11-4

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(method of inhibiting fibrosis with a **somatostatin** agonist)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 14 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:426626 HCAPLUS

DOCUMENT NUMBER: 125:136537

TITLE: Preclinical evaluation of technetium-99m-labeled **somatostatin** receptor-binding peptides

AUTHOR(S): Vallabhajosula, Shankar; Moyer, Brian R.; Lister-James, John; McBride, Bill J.; Lipszyc, Helena; Lee, Hiram; Bastidas, Diago; Dean, Richard T.  
CORPORATE SOURCE: Department Radiology, Mount Sinai Medical Center, New York, NY, 10029, USA

SOURCE: Journal of Nuclear Medicine (1996), 37(6), 1016-1022  
CODEN: JNMEAQ; ISSN: 0161-5505

PUBLISHER: Society of Nuclear Medicine

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We report here the results of studies on the in vitro receptor binding affinity, in vivo tumor uptake and biodistribution of two <sup>99m</sup>Tc-labeled peptides. Peptides P587 and P829 were synthesized by N- $\alpha$ -Fmoc peptide chem., purified by reversed-phase HPLC and characterized by fast-atom bombardment mass spectrometry. The peptides were labeled with <sup>99m</sup>Tc by ligand exchange from <sup>99m</sup>Tc-glucoheptonate. In vitro **somatostatin** receptors (SSTR)-binding affinities of P587, P829 and their oxorhenium complexes, [DTPA]octreotide and In-[DTPA]octreotide were detd. in an inhibition assay using AR42J rat pancreatic tumor cell membranes and <sup>125</sup>I-[Tyr3]**somatostatin**-14 as the probe. In vivo single- and dual-tracer studies of <sup>99m</sup>Tc peptides and <sup>111</sup>In-[DTPA]octreotide were carried out using Lewis rats bearing CA20948 rat pancreatic tumor implants. Technetium-99m-P587 and <sup>99m</sup>Tc-P829 of high-specific activity (>60 Ci (2.2 TBq)/mmole) were prepd. in >90% radiochem. yield. P587 and P829 had a  $K_i$  = 2.5 nM and 10 nM, resp. [ReO]P587 and [ReO]P829, representing the <sup>99m</sup>Tc complexes, had  $K_i$  = 0.15 nM and 0.32 nM, resp. In comparison, [DTPA]octreotide and In-[DTPA]octreotide had  $K_i$  = 1.6 and 1.2 nM, resp. In vivo tumor uptake of <sup>99m</sup>Tc-P587 and <sup>99m</sup>Tc-P829 was high (4.1 and 4.9%ID/g at 90 min postinjection compared to 2.9% for <sup>111</sup>In-[DTPA]octreotide). Tumor/blood and tumor/muscle ratios at 90 min postinjection were 6 and 33 for <sup>99m</sup>Tc-P587, 21 and 68 for <sup>99m</sup>Tc-P829, and 22 and 64 for <sup>111</sup>In-[DTPA]octreotide. The high SSTR-binding affinity and high, receptor-specific and saturable in vivo tumor uptake indicate that <sup>99m</sup>Tc-P587 and <sup>99m</sup>Tc-P829 are promising radiotracers for the clin. detection of SSTR-expressing tumors and other tissues by <sup>99m</sup>Tc gamma scintigraphy.

IT 161982-57-6D, technetium-99 conjugates  
 RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
 (preclin. evaluation of technetium-99m-labeled **somatostatin** receptor-binding peptides for potential scintigraphy of **somatostatin** receptor expressing tumors)

IT 174900-52-8P 179818-76-9P  
 RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
 (preclin. evaluation of technetium-99m-labeled **somatostatin** receptor-binding peptides for potential scintigraphy of **somatostatin** receptor expressing tumors)

L38 ANSWER 15 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1996:367653 HCAPLUS  
 DOCUMENT NUMBER: 125:52519  
 TITLE: Cyclic hexapeptide **somatostatin** analogs for radiodiagnosis and radiotherapy  
 INVENTOR(S): Dean, Richard T.; McBride, William; Lister-James, John  
 PATENT ASSIGNEE(S): Lister-James, John, USA  
 SOURCE: PCT Int. Appl., 29 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9604308	A1	19960215	WO 1995-US9276	19950720
W: AU, BR, CA, CN, JP, KR, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5932189	A	19990803	US 1994-282980	19940729
CA 2195395	AA	19960215	CA 1995-2195395	19950720
CA 2195395	C	20010501		
AU 9531984	A1	19960304	AU 1995-31984	19950720
AU 702917	B2	19990311		
EP 775160	A1	19970528	EP 1995-928109	19950720
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CN 1161698	A	19971008	CN 1995-194920	19950720
BR 9508467	A	19971223	BR 1995-8467	19950720
JP 10506880	T2	19980707	JP 1995-506575	19950720
JP 3117218	B2	20001211	JP 1996-506575	19950720
ZA 9506254	A	19960313	ZA 1995-6254	19950727
US 5955426	A	19990921	US 1997-776160	19970630
PRIORITY APPLN. INFO.:			US 1994-282980	A2 19940729
			WO 1995-US9276	W 19950720

OTHER SOURCE(S): MARPAT 125:52519

AB The invention relates to therapeutic reagents and peptides, including radiotherapeutic reagents and peptides, and radiodiagnostic reagents and peptides. Specifically, the invention relates to cyclic peptide derivs. and analogs of **somatostatin**, and embodiments of such peptides radiolabeled with a radioisotope, as well as methods for using such peptides for radiodiagnostic and radiotherapeutic purposes. Receptor-binding data are included. Localization and in vivo imaging of **somatostatin** receptor-expressing tumors in rats are described (no data).

IT 51110-01-1DP, Somatostatin, analogs and derivs.  
 161982-27-0P 161982-29-2P 161982-30-5P  
 161982-55-4P 161982-57-6P 161982-58-7P  
 161982-59-8P 161982-60-1P 172485-51-7P

172485-52-8P 172485-53-9P 172485-54-0P  
 172485-56-2P 172485-58-4P 172485-59-5P  
 172485-60-8P 172485-61-9P 172485-62-0P  
 172485-63-1P 174350-42-6P 174350-62-0P  
 174350-66-4P 174900-23-3P 174900-24-4P  
 177788-58-8P 177788-59-9P 177788-60-2P  
 177788-61-3P 177788-62-4P 177788-64-6P  
 177788-65-7P 177788-66-8P 177788-70-4P  
 177788-71-5P 177788-72-6P 177788-77-1P  
 177788-79-3P 177788-80-6P 177788-81-7P  
 177788-82-8P 177788-83-9P 177788-84-0P  
 177788-85-1P 177788-86-2P 177788-87-3P  
 177788-88-4P 177788-89-5P 177788-90-8P  
 177788-91-9P 177788-92-0P 177788-93-1P  
 177788-94-2P 177788-95-3P 177788-96-4P  
 177788-97-5P 177788-98-6P 177788-99-7P  
 177789-00-3P 177789-01-4P 177789-03-6P  
 177789-09-2P 177789-10-5P 177789-11-6P  
 177789-12-7P 177789-13-8P 177789-14-9P  
 177932-82-0P 179530-41-7P 179530-42-8P

RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
 (cyclic hexapeptide **somatostatin** analogs for radiodiagnosis and radiotherapy)

L38 ANSWER 16 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:155533 HCAPLUS  
 DOCUMENT NUMBER: 124:212160  
 TITLE: Monoamine, diamide, thiol-containing metal chelating agents  
 INVENTOR(S): Mcbride, William; Dean, Richard T.  
 PATENT ASSIGNEE(S): Diatech, Inc., USA  
 SOURCE: PCT Int. Appl., 64 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 44  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9533497	A1	19951214	WO 1995-US6914	19950601
W: AU, BR, CA, CN, JP, KR				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2191951	AA	19951214	CA 1995-2191951	19950601
AU 9526944	A1	19960104	AU 1995-26944	19950601
AU 707040	B2	19990701		
BR 9507917	A	19970812	BR 1995-7917	19950601
CN 1158090	A	19970827	CN 1995-194356	19950601
CN 1093424	B	20021030		
EP 804252	A2	19971105	EP 1995-922159	19950601
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
JP 10501531	T2	19980210	JP 1995-501181	19950601
ZA 9504548	A	19960315	ZA 1995-4548	19950602
PRIORITY APPLN. INFO.:			US 1994-253973	A 19940603
			WO 1995-US6914	W 19950601

OTHER SOURCE(S): MARPAT 124:212160

AB The invention relates to reagents useful in prepg. radiolabeled diagnostic and therapeutic agents (radiopharmaceuticals). Specifically, the invention provides such reagents that are monoamine, diamide, and thiol-contg. metal chelators. Methods of making such reagents, and methods of using the radiopharmaceuticals produced therefrom are also

provided.

IT 161982-27-ODP, technetium 99 complexes 161982-55-4DP, technetium 99 complexes 174350-42-6DP, technetium 99 complexes 174350-57-3DP, technetium 99 complexes 174350-61-9DP, technetium 99 complexes 174350-62-ODP, technetium 99 complexes 174350-63-1DP, technetium 99 complexes 174350-64-2DP, technetium 99 complexes  
 RL: PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (monoamine, diamide, and thiol-contg. metal chelating agents as radiopharmaceuticals)

IT 161982-27-0P 161982-55-4P 174350-42-6P 174350-57-3P 174350-61-9P 174350-62-0P 174350-63-1P 174350-64-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (monoamine, diamide, and thiol-contg. metal chelating agents as radiopharmaceuticals)

IT 174350-66-4  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (monoamine, diamide, and thiol-contg. metal chelating agents as radiopharmaceuticals)

IT 51110-01-1, **Somatostatin**  
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (radiopharmaceuticals binding to; monoamine, diamide, and thiol-contg. metal chelating agents as radiopharmaceuticals)

L38 ANSWER 17 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:148249 HCAPLUS

DOCUMENT NUMBER: 124:261669

TITLE: **Somatostatin** Receptor-Binding Peptides  
 Labeled with Technetium-99m : Chemistry and Initial Biological Studies  
 AUTHOR(S): Pearson, Daniel A.; Lister-James, John; McBride, William J.; Wilson, David M.; Martel, Lawrence J.; Civitello, Edgar R.; Taylor, John E.; Moyer, Brian R.; Dean, Richard T.

CORPORATE SOURCE: Department of Chemistry, Diotech Inc., Londonderry, NH, 03053, USA

SOURCE: Journal of Medicinal Chemistry (1996), 39(7), 1361-71  
 CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The synthesis of peptides which possess a high affinity for the **somatostatin** receptor and contain a chelator for the radionuclide technetium-99m is described. The target compds. were designed such that they would form stable, oxotechnetium(V) chelate complexes in which the site of metal coordination was well defined and remote from the receptor-binding region. Oxorhenium(V) chelate complexes of these peptides were prepd. as nonradioactive surrogates for the technetium complexes. Peptide oxorhenium complexes and Tc-99m complexes eluted closely upon HPLC anal. The receptor-binding affinities of both the free and rhenium-coordinated species were measured in vitro. The binding affinities of the free peptides ( $K_i$ 's in the 0.25-10 nM range) compared favorably with [DTPA]octreotide ( $K_i = 1.6$  nM), which, as the indium-111 complex, is already approved for **somatostatin**-type receptor (SSTR)-expressing tumor imaging in the United States and Europe. Furthermore, the rhenium-coordinated peptides had binding affinities which, in many cases, were higher than those of the corresponding free peptides, with several complexes having  $K_i = 0.1$  nM. Some of the more potent SSTR-binding peptides were labeled with technetium-99m and assessed in an in vivo study with tumor-bearing rats. The 99mTc-labeled peptides

prepd. in this study should be useful as SSSTR-expressing tumor-imaging agents due to their high SSSTR-binding affinities, ease of prepn., and, because they are low mol. wt. peptides, expected pharmacokinetics characterized by rapid tracer excretion from the body resulting in high-contrast images.

IT 161889-37-8P 161982-27-0P 161982-29-2P  
161982-30-5P 161982-57-6P 161982-58-7P  
161982-59-8P 161982-60-1P 174350-62-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. and initial biol. studies of **somatostatin** receptor-binding peptides complexed with oxorhenium(V) and oxotechnetium-99m)

IT 174900-25-5P 174900-26-6P 174900-27-7P  
174900-28-8P 174900-29-9P 174900-30-2P  
174900-31-3P 174900-32-4P 174900-33-5P  
174900-34-6P 174900-35-7P 174900-36-8P  
174900-37-9P 174900-38-0P 174900-39-1P  
174900-40-4P 174900-41-5P 174900-42-6P  
174900-43-7P 174900-44-8P 174900-45-9P  
174900-46-0P 174900-47-1P 174900-48-2P  
174900-49-3P 174900-50-6P 174900-51-7P  
174900-52-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(prepn. and initial biol. studies of **somatostatin** receptor-binding peptides complexed with oxorhenium(V) and oxotechnetium-99m)

IT 172485-51-7P 172485-52-8P 172485-53-9P  
172485-54-0P 172485-56-2P 172485-57-3P  
172485-58-4P 172485-61-9P 174900-23-3P  
174900-24-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. and initial biol. studies of **somatostatin** receptor-binding peptides complexed with oxorhenium(V) and oxotechnetium-99m)

L38 ANSWER 18 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:147789 HCAPLUS  
DOCUMENT NUMBER: 124:197258  
TITLE: Technetium-99m-labeled peptides for imaging  
INVENTOR(S): Dean, Richard T.; Buttram, Scott; McBride, William;  
Lister-James, John; Civitello, Edgar R.  
PATENT ASSIGNEE(S): Diotech, Inc., USA  
SOURCE: PCT Int. Appl., 42 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 44  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9533498	A1	19951214	WO 1995-US7017	19950601
W: AU, BR, CA, CN, JP, KR				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5997844	A	19991207	US 1994-253678	19940603
AU 9527783	A1	19960104	AU 1995-27783	19950601
AU 697048	B2	19980924		
EP 762901	A1	19970319	EP 1995-922946	19950601

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE  
 JP 10501241 T2 19980203 JP 1995-501223 19950601  
 PRIORITY APPLN. INFO.: US 1994-253678 A 19940603  
 US 1991-653012 B2 19910208  
 US 1993-92355 A2 19930715  
 WO 1995-US7017 W 19950601

OTHER SOURCE(S): MARPAT 124:197258

AB Radiolabeled peptides and methods for producing them are disclosed. Specifically, the invention relates to peptides, methods, and kits for making the peptides, as well as methods for using such peptides to image sites in a mammalian body labeled with technetium-99m via a radiolabel-binding moiety covalently attached to a specific binding peptide via an amino acid side-chain of the peptide. Peptide sequences are included.

IT **161889-37-8DP**, technetium-99m-radiolabeled **161982-57-6DP**, technetium-99m-radiolabeled **161982-59-8DP**, technetium-99m-radiolabeled

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(radiolabeled peptides for imaging and their prepn.)

IT **51110-01-1, Somatostatin**

RL: BSU (Biological study, unclassified); BIOL (Biological study) (receptor, tumor expressing; radiolabeled peptides for imaging and their prepn.)

L38 ANSWER 19 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:137633 HCAPLUS

DOCUMENT NUMBER: 124:169545

TITLE: **Somatostatin** receptor-binding peptide-metal chelate conjugates for diagnosis and therapy

INVENTOR(S): Dean, Richard

PATENT ASSIGNEE(S): Diatech, Inc., USA

SOURCE: PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 44

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9531221	A1	19951123	WO 1995-US6034	19950512
W: AU, CA, CN, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5783170	A	19980721	US 1994-241625	19940512
AU 9525500	A1	19951205	AU 1995-25500	19950512
AU 708797	B2	19990812		
EP 759786	A1	19970305	EP 1995-919827	19950512
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 10500411	T2	19980113	JP 1995-529821	19950512
PRIORITY APPLN. INFO.:				
			US 1994-241625	A 19940512
			US 1991-807062	A2 19911127
			WO 1995-US6034	W 19950512

OTHER SOURCE(S): MARPAT 124:169545

AB This invention relates to diagnostic and radiodiagnostic agents, including radiolabeled scintigraphic imaging agents, and therapeutic and radiotherapeutic agents. The invention provides such agents and reagents for prepg. such agents, and methods for producing and using such reagents. Specifically, the invention provides radiolabeled imaging agents and nonradioactively labeled imaging agents for imaging sites in a mammalian body and reagents for prepg. these imaging agents. The invention also provides radiolabeled therapeutic agents, as well as nonradioactively labeled therapeutic agents, and reagents and methods for prepg. these

agents. The agents and reagents provided comprise a specific binding peptide, covalently linked to a metal ion-complexing moiety. Reagents, methods and kits for making such reagents, methods for labeling such reagents, and methods for using such labeled reagents are provided. Prepn. of cyclic peptides of the invention is described, as are their labeling with <sup>99m</sup>Tc and in vivo imaging of **somatostatin** receptor-contg. tumors.

IT 51110-01-1, **Somatostatin**

RL: BSU (Biological study, unclassified); BIOL (Biological study) (receptor; **somatostatin** receptor-binding peptide-metal chelate conjugates for diagnosis and therapy)

IT 161889-37-8D, metal ion-complexing moiety-linked  
161982-57-6D, metal ion-complexing moiety-linked  
161982-59-8D, metal ion-complexing moiety-linked  
161982-60-1D, metal ion-complexing moiety-linked  
172485-52-8D, metal ion-complexing moiety-linked  
172485-53-9D, metal ion-complexing moiety-linked

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (**somatostatin** receptor-binding peptide-metal chelate conjugates for diagnosis and therapy)

L38 ANSWER 20 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:38230 HCAPLUS

DOCUMENT NUMBER: 124:169544

TITLE: Technetium-99m-labeled peptides as scintigraphic imaging agents

INVENTOR(S): Dean, Richard T.; Lister-James, John; McBride, William

PATENT ASSIGNEE(S): Diatech, Inc., USA

SOURCE: PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 44

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9529708	A1	19951109	WO 1995-US5340	19950501
W: AU, CA, CN, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2189420	AA	19951109	CA 1995-2189420	19950501
AU 9524633	A1	19951129	AU 1995-24633	19950501
AU 704460	B2	19990422		
EP 772459	A1	19970514	EP 1995-918875	19950501
EP 772459	B1	20030319		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CN 1152881	A	19970625	CN 1995-193737	19950501
CN 1087955	B	20020724		
JP 09512555	T2	19971216	JP 1995-528440	19950501
AT 234639	E	20030415	AT 1995-918875	19950501
ZA 9503494	A	19960628	ZA 1995-3494	19950502
PRIORITY APPLN. INFO.:			US 1994-236402	A2 19940502
			WO 1995-US5340	W 19950501

OTHER SOURCE(S): MARPAT 124:169544

AB A scintigraphic imaging agent for imaging sites in a mammalian body comprises a specific binding compd. of mol. wt. <10,000 covalently linked to a radiolabel-complexing peptide R1COA1A2Z [R1 = C1-4 alkyl, covalent linkage to specific binding compd.; A1, A2 = amino acid not contg. an SH group; Z = SH-contg. group selected from Cys, homocysteine, isocysteine, penicillamine, HSCH2CH2NH2, HSCH2CH2CH2NH2; if Z contains a CO group, it is linked to OH, (substituted) amino, amino acid, or (cyclic) peptide] or YA2A1NHR2 [Y = Z above, linked (if any of 1st 4 compds.) to H, amino acid, or (cyclic) peptide; A1, A2 as above; R2 = H, C1-4 alkyl, covalent linkage

to specific binding compd.]. The radiolabel (e.g. 99mTc)-complexing moiety is covalently linked to the specific binding compd. through R1, R2, a sidechain group of A1 or A2, or the NH2 or CO2H group of Cys, homocysteine, isocysteine, or penicillamine. These compds., owing to their low mol. wt., are not likely to be immunogenic and are cleared rapidly from the vasculature, allowing for rapid imaging and diagnosis. The reagent may alternatively contain a polyvalent linking moiety covalently linked to multiple specific binding compds. and multiple radiolabel-complexing peptides. Thus, 99mTc-labeled HSCH2CO-GGGRALVDTLKFVTQAEGAK-NH2 was injected into rabbits which had been fed a cholesterol-rich diet for imaging of atherosclerotic plaques with a .gamma. camera.

IT **51110-01-1, Somatostatin**

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(receptors; technetium-99m-labeled peptides as scintigraphic imaging agents)

IT **161889-37-8D**, technetium-labeled **161982-57-6D**,  
technetium-labeled **161982-59-8D**, technetium-labeled  
**172485-51-7D**, technetium-labeled **172485-52-8D**,  
technetium-labeled **172485-53-9D**, technetium-labeled  
**172485-54-0D**, technetium-labeled **172485-55-1D**,  
technetium-labeled **172485-56-2D**, technetium-labeled  
**172485-57-3D**, technetium-labeled **172485-58-4D**,  
technetium-labeled **172485-59-5D**, technetium-labeled  
**172485-60-8D**, technetium-labeled **172485-61-9D**,  
technetium-labeled **172485-62-0D**, technetium-labeled  
**172485-63-1D**, technetium-labeled

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(technetium-99m-labeled peptides as scintigraphic imaging agents)

L38 ANSWER 21 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1995:465577 HCAPLUS

DOCUMENT NUMBER: 122:234388

TITLE: Radiolabeled **somatostatin**-derived peptides  
for imaging and therapeutic uses

INVENTOR(S): Dean, Richard T.; McBride, William; Lister-James, John

PATENT ASSIGNEE(S): Diatech, Inc., USA

SOURCE: PCT Int. Appl., 72 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 44

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9500553	A1	19950105	WO 1994-US6274	19940603
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6017509	A	20000125	US 1993-92355	19930715
AU 9470990	A1	19950117	AU 1994-70990	19940603
AU 701083	B2	19990121		
EP 720621	A1	19960710	EP 1994-920076	19940603
EP 720621	B1	20010207		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, SE				
AT 199089	E	20010215	AT 1994-920076	19940603
CA 2167281	C	20010904	CA 1994-2167281	19940603
US 6051206	A	20000418	US 1996-592323	19960506
PRIORITY APPLN. INFO.:			US 1993-92355	A 19930715
			US 1991-807062	A2 19911127
			WO 1993-US6029	W 19930623
			WO 1994-US6274	W 19940603
OTHER SOURCE(S):		MARPAT 122:234388		



AB Therapeutic reagents and peptides, including radiotherapeutic reagents and peptides, radiodiagnostic reagents and peptides, and methods for producing labeled radiodiagnostic agents, are disclosed. Specifically, the invention relates to cyclic peptide derivs. and analogs of **somatostatin**, and embodiments of such peptides radiolabeled with a radioisotope, as well as methods and kits for making, radiolabeling, and using such peptides for radiodiagnostic and radiotherapeutic purposes. The invention specifically relates to cyclic peptide derivs. and analogs of **somatostatin** radiolabeled with technetium-99m and uses thereof as scintigraphic imaging agents. The invention also specifically relates to cyclic peptide derivs. and analogs of **somatostatin** radiolabeled with cytotoxic radioisotopes (e.g. 186Re, 188Re) for use as radiotherapeutic agents. Methods and kits for making, radiolabeling, and using such peptides diagnostically and therapeutically in a mammalian body are also provided. Data for binding of the analogs to **somatostatin** receptors is included, as is use in imaging of **somatostatin** receptor-expressing tumors.

IT 161982-32-7

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(prepn. and use of radiolabeled **somatostatin**-derived peptides for imaging and therapeutic uses)

IT 161982-55-4DP, technetium-99m complexes 161982-55-4P

161982-56-5DP, technetium-99m complexes 161982-56-5P

161982-57-6DP, technetium-99m complexes 161982-57-6P

161982-58-7DP, technetium-99m complexes 161982-58-7P

161982-59-8DP, technetium-99m complexes 161982-59-8P

161982-60-1DP, technetium-99m complexes 161982-60-1P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. and use of radiolabeled **somatostatin**-derived peptides for imaging and therapeutic uses)

IT 51110-01-1D, **Somatostatin**, analogs 161982-27-0

161982-27-0D, radioisotope complexes 161982-28-1

161982-28-1D, radioisotope complexes 161982-29-2

161982-29-2D, radioisotope complexes 161982-30-5

161982-30-5D, radioisotope complexes

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(prepn. and use of radiolabeled **somatostatin**-derived peptides for imaging and therapeutic uses)

L38 ANSWER 22 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1995:452298 HCAPLUS

DOCUMENT NUMBER: 124:49695

TITLE: **Somatostatin** derivatives and their radiolabelled products

INVENTOR(S): McBride, William; Dean, Richard T.

PATENT ASSIGNEE(S): Diatech, INC., USA

SOURCE: PCT Int. Appl., 58 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 44

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9503330	A1	19950202	WO 1994-US8335	19940721
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5620675	A	19970415	US 1993-95760	19930721
AU 9475506	A1	19950220	AU 1994-75506	19940721

AU 684823	B2	19980108		
JP 09501419	T2	19970210	JP 1995-505359	19940721
EP 804481	A1	19971105	EP 1994-925686	19940721
EP 804481	B1	20030416		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, IE				
AT 237637	E	20030515	AT 1994-925686	19940721
US 6241965	B1	20010605	US 1996-586670	19960422

PRIORITY APPLN. INFO.:  
 US 1993-95760 A 19930721  
 US 1992-902935 A2 19920623  
 WO 1994-US8335 W 19940721

OTHER SOURCE(S): MARPAT 124:49695

AB Linear peptide derivs. and analogs of **somatostatin** radiolabeled with <sup>99m</sup>Tc are useful as scintigraphic imaging agents. Linear peptide derivs. and analogs of **somatostatin** radiolabeled with cytotoxic radioisotopes such as <sup>186</sup>Re and <sup>188</sup>Re are useful as radiotherapeutic agents. Methods and kits for making, radiolabeling, and using such peptides diagnostically and therapeutically in a mammal are provided.

IT **51110-01-1D, Somatostatin**, analogs **161889-37-8D**, complexes with radioelements  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (somatostatin derivs. and radiolabeled products for imaging and therapy)

L38 ANSWER 23 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1992:470317 HCAPLUS

DOCUMENT NUMBER: 117:70317

TITLE: Metastable fragmentation of **somatostatin-14** (SS-14) and a series of SS-14 analogs formed with liquid secondary ion mass spectrometry: observation of fragment ions which involve unsymmetric disulfide bridge cleavage concomitant with peptide chain cleavage

AUTHOR(S): Craig, A. Grey; Rivier, Jean E.

CORPORATE SOURCE: Salk Inst., San Diego, CA, 92138-9216, USA

SOURCE: Organic Mass Spectrometry (1992), 27(5), 549-59

CODEN: ORMSBG; ISSN: 0030-493X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB **Somatostatin-14** (I) and several analogs were analyzed using liq. secondary ion mass spectrometry (LSIMS). The obsd. isotope distributions showed low levels of reduced I. The daughter-ion spectra of the protonated mol. ions of I and several analogs contained a no. of metastable fragment ions. Two fragments in these spectra were assigned to cleavage of the peptide chain concomitant with unsym. cleavage of the disulfide bridge. Single alanine-substituted analogs of I were used to confirm these assignments, while single D isomer-substituted analogs of I were used to investigate the dependence of the cleavages on conformation.

IT **40958-31-4, Somatostatin** (sheep reduced)

RL: PRP (Properties)

(in situ formation and liq. secondary ion mass spectra of)

IT **142570-89-6**

RL: PRP (Properties)

(in situ redn. and liq. secondary ion mass spectra of, unsym. disulfide cleavage in)

IT **142570-90-9 142570-91-0 142570-92-1**

**142570-93-2 142570-94-3 142570-95-4**

**142570-96-5 142570-97-6 142570-98-7**

**142570-99-8 142571-00-4 142632-54-0**

**142632-55-1 142632-56-2 142632-57-3**

**142632-58-4 142632-59-5**

RL: PRP (Properties)

(liq. secondary ion mass spectra of, unsym. disulfide cleavage in)

L38 ANSWER 24 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1985:535323 HCAPLUS

DOCUMENT NUMBER: 103:135323

TITLE: New analogs of **somatostatin** with unexpected effects in vivo on insulin basal secretion in the rat (1)

AUTHOR(S): Diaz, Joseph; Cazaubon, Catherine; Demarne, Henri; Gagnol, Jean Pierre; Guegan, Remy; Muneaux, Yvette; Perreaut, Pierre; Richaud, Jean Paul; Vedel, Michel; Roncucci, Romeo

CORPORATE SOURCE: Cent. Rech., Clin-Midy/Sanofi, Montpellier, 34082, Fr.  
SOURCE: European Journal of Medicinal Chemistry (1985), 20(3), 219-27

CODEN: EJMCA5; ISSN: 0223-5234

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Twenty analogs of **somatostatin** were synthesized by the alternating soln./solid-phase procedure. The peptide analogs contg. taurine aza-alanine or D-amino acids as well as multiple deletions were examd. for the selective inhibition of insulin [9004-10-8] or glucagon [9007-92-5] release. The biol. activities were evaluated in vivo in the rat by measuring the effects of the modified **somatostatin** mols. on basal secretion of insulin and glucagon in the portal vein. Although some selective analogs were found, a few of them having a taurine or an aza-alanine residue in their structure caused an increase of insulin secretion. This unexpected phenomenon is unexplained and under investigation.

IT 38916-34-6

RL: BIOL (Biological study)

(glucagon and insulin secretion response to, mol. structure in relation to)

IT 89318-97-8P 89343-24-8P 89343-46-4P

89343-47-5P 89343-48-6P 89343-49-7P

89343-54-4P 89343-89-5P 89343-90-8P

89343-91-9P 89343-92-0P 89343-93-1P

98154-87-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. and glucagon and insulin secretion response to, mol. structure in relation to)

IT 51110-01-1DP, analogs

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of, and their effect on glucagon and insulin secretion, mol. structure in relation to)

L38 ANSWER 25 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1985:215394 HCAPLUS

DOCUMENT NUMBER: 102:215394

TITLE: **Somatostatin** analogs: correlation of receptor affinity with inhibition of cyclic AMP formation in pancreatic acinar cells

AUTHOR(S): Taparel, D.; Susini, C.; Esteve, J. P.; Diaz, J.; Cazaubon, C.; Vaysse, N.; Ribet, A.

CORPORATE SOURCE: INSERM, Toulouse, 31054, Fr.

SOURCE: Peptides (New York, NY, United States) (1985), 6(1), 109-14

CODEN: PPTDD5; ISSN: 0196-9781

DOCUMENT TYPE: Journal

LANGUAGE: English

GI

H-Cys-AzaAla-Phe-Phe-D-Trp-Lys-Thr-Phe-Phe-Cys-OH

I

AB Cyclic **somatostatin** [38916-34-6] inhibited secretin [1393-25-5]-stimulated cAMP [60-92-4] formation in pancreatic acinar cells. The inhibition was only partial. Maximal inhibition reached .apprx.50%. **Somatostatin** analogs tested inhibited secretin-stimulated cAMP formation with a lower potency than **somatostatin**. I [89343-24-8] was an antagonist of **somatostatin** in inhibiting secretin-stimulated cAMP. Analogs inhibited the binding of 125I-labeled [Tyr11]**somatostatin** to pancreatic acini. There was a good correlation between concn. for inhibiting secretin-stimulated cAMP by 50% and receptor binding affinities.

IT 38916-34-6 61950-59-2 75037-27-3  
89318-97-8 89343-24-8 89343-46-4  
89343-47-5 89343-89-5 89343-90-8  
96608-45-6 96608-46-7 96608-47-8  
96608-48-9

RL: BIOL (Biological study)

(cAMP formation inhibition by and receptor binding of, in pancreas, mol. structure in relation to)

L38 ANSWER 26 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1984:473083 HCAPLUS

DOCUMENT NUMBER: 101:73083

TITLE: An improved procedure for peptide cyclization

AUTHOR(S): Brady, Stephen F.; Paleveda, William J.; Arison, Byron H.; Freidinger, Roger M.; Nutt, Ruth F.; Veber, Daniel F.

CORPORATE SOURCE: Merck Sharp and Dohme Res. Lab., West Point, PA, 19486, USA

SOURCE: Pept.: Struct. Funct., Proc. Am. Pept. Symp., 8th (1983), 127-30. Editor(s): Hruby, Victor J.; Rich, Daniel H. Pierce Chem. Co.: Rockford, Ill.  
CODEN: 51KAAK

DOCUMENT TYPE: Conference

LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB Cyclization of H-D-Trp-L-Lys(R)-L-Val-L-Phe-L-MeAla-L-Tyr-OH [I; R = PhCH<sub>2</sub>O<sub>2</sub>C (Z)] by Ph<sub>2</sub>P(O)N<sub>3</sub> was studied in the presence of various bases. Replacement of Et<sub>3</sub>N by NaHCO<sub>3</sub> or K<sub>2</sub>HPO<sub>4</sub> resulted in highly efficient cyclization to .alpha.-product II (R = Z). Less than 0.3% racemization at tyrosine was obsd. under optimal conditions. Similar cyclization. of I (R = H) in the presence NaHCO<sub>3</sub> gave **somatostatin** analog II (R = H) 26, .epsilon.-product III 21, and dimeric products 41%; with K<sub>2</sub>HPO<sub>4</sub>, dimeric products were virtually eliminated but the selectivity for II (R = H) was lower.

IT 91297-72-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

L38 ANSWER 27 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1984:192280 HCAPLUS

DOCUMENT NUMBER: 100:192280

TITLE: Taurine-substituted **somatostatin** analogs and medicines containing them for treating diabetes  
INVENTOR(S): Diaz, Joseph; Vedel, Michel; Gagnol, Jean Pierre

PATENT ASSIGNEE(S): Sanofi, Fr.

SOURCE: Fr. Demande, 32 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2522656	A1	19830909	FR 1982-3778	19820305
FR 2522656	B1	19871224		

PRIORITY APPLN. INFO.: FR 1982-3778 19820305

OTHER SOURCE(S): CASREACT 100:192280

GI For diagram(s), see printed CA Issue.

AB Eight taurine-contg. **somatostatin** analogs were prepd. as antidiabetics. Thus, Boc-Ala-Gly-Cys(Acm)-Lys(Msc)-Asn-Phe-Tau-Phe-OH (I; Tau = NHCH<sub>2</sub>CH<sub>2</sub>SO<sub>2</sub>, Boc = Me<sub>3</sub>CO<sub>2</sub>C, Acm = CH<sub>2</sub>NHAc, Msc = CO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>SO<sub>2</sub>Me) was coupled with H-Trp-Lys(Msc)-Thr-Phe-Thr-Ser-Cys(Acm)-OPse (II, Pse = CH<sub>2</sub>CH<sub>2</sub>SO<sub>2</sub>CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>N:NPh-p) by DCC/1-hydroxybenzotriazole to give Boc-Ala-Gly-Cys(Acm)-Lys(Msc)-Asn-Phe-Tau-Phe-Trp-Lys(Msc)-Thr-Phe-Thr-Ser-Cys(Acm)-OPse, which was Boc-deblocked by CF<sub>3</sub>CO<sub>2</sub>H and then Msc- and Pse-deblocked to give H-Ala-Gly-Cys(Acm)-Lys-Asn-Phe-Tau-Phe-Trp-Lys-Thr-Phe-Thr-Ser-Cys(Acm)-OH. The latter was Acm-deblocked by AgNO<sub>3</sub> and then cyclized by oxidn. to give **somatostatin** analog III. I and II were prepd. by conventional soln. methods. The title analogs inhibit the secretion of insulin and glucagon without affecting digestive secretion.

IT **89344-14-9P 89344-15-0P 89344-28-5P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. and deblocking of)

IT **89344-29-6P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. and deblocking-oxidative cyclization of)

IT **89343-90-8P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and glucagon release-inhibiting activity of)

IT **51110-01-1DP**, taurine-contg. analogs

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and insulin and glucagon release-inhibiting activities of)

IT **89343-91-9P 89343-93-1P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and insulin and glucagon release-inhibiting activity of)

IT **89306-52-5P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. and oxidative cyclization of)

IT **89344-12-7P 89344-26-3P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and partial deblocking of)

IT **89343-89-5P 89343-92-0P 89343-95-3P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

L38 ANSWER 28 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1984:175295 HCAPLUS

DOCUMENT NUMBER: 100:175295

TITLE: Azaalanine-substituted **somatostatin** analogs  
 and medicaments containing them, used for the  
 treatment of diabetes

INVENTOR(S): Vedel, Michel; Diaz, Joseph; Cazaubon, Catherine

PATENT ASSIGNEE(S): Sanofi, Fr.

SOURCE: Fr. Demande, 34 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2523126	A1	19830916	FR 1982-3853	19820308

PRIORITY APPLN. INFO.: FR 1982-3853 19820308  
 OTHER SOURCE(S): CASREACT 100:175295  
 GI For diagram(s), see printed CA Issue.  
 AB **Somatostatin** analogs I (AzaA = NHNMeCO; R = H, amino acid or dipeptide residue; X = D- or L-Cys; X1 = D- or L-Trp; X2 = Thr, D-Phe, null; X3 = Ser, null) and their salts were prepd. Thus, Boc-Ala-Gly-Cys(Acm)-AzaA-Phe-Phe-Trp-Lys(Msc)-Thr-Phe-Thr-Ser-Cys(Acm)-OPsc [Boc = Me3CO2C, Acm = CH2NHAc, Msc = CO2CH2CH2SO2Me, Psc = CH2CH2SO2CH2C6H4(N:NPh)-p] was prepd. by conventional soln. methods and then it was Boc-deblocked by CF3CO2H and then Msc- and Psc-deblocked to give H-Ala-Gly-Cys(Acm)-AzaA-Phe-Phe-Trp-Lys-Thr-Phe-Thr-Ser-Cys(Acm)-OH. The latter was Acm-deblocked and cyclized by oxidn. with K3[Fe(CN)6] to give **somatostatin** analog II. II inhibited the secretion of insulin.  
 IT **89318-95-6P 89343-12-4P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. and deblocking of)  
 IT **89318-96-7P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. and deprotection-cyclization of)  
 IT **89318-97-8P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and insulin release-inhibiting activity of)  
 IT **89318-98-9P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. and oxidative cyclization of)  
 IT **89343-24-8P 89343-46-4P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)  
 IT **51110-01-1DP, azaalanine-contg. analogs**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, as antidiabetics)  
 IT **9002-72-6**  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (secretion of, azaalanine **somatostatin** analogs effect on)

L38 ANSWER 29 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1984:139624 HCAPLUS  
 DOCUMENT NUMBER: 100:139624  
 TITLE: **Somatostatin** analogs with modified biological activity and medicaments containing them  
 INVENTOR(S): Diaz, Joseph; Muneaux, Yvette; Roncucci, Romeo  
 PATENT ASSIGNEE(S): Sanofi, Fr.  
 SOURCE: Fr. Demande, 24 pp.  
 CODEN: FRXXBL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2523125	A1	19830916	FR 1982-3852	19820308

## PRIORITY APPLN. INFO.:

FR 1982-3852

19820308

## OTHER SOURCE(S):

CASREACT 100:139624

GI For diagram(s), see printed CA Issue.

AB **Somatostatin** analogs I (R = H or an amino acid or dipeptide residue; X = D- or L-Cys; X1 = Phe, D-Ala, null; X2 = L- or D-Phe or Gly; X3 = L- or D-Phe, null) and their salts were prepd. Thus, Boc-Cys(Acm)-D-Phe-Phe-D-Trp-Lys(Msc)-Thr-Phe-Phe-D-Cys(Acm)-OPse (Boc = Me3CO2C, Acm = AcNHCH2, Msc = MeSO2CH2CH2O2C, Pse = p-PhN:NC6H4CH2SO2CH2CH2) was prepd. by stepwise coupling in soln. and then it was Boc-deblocked by acidolysis and then Msc- and Pse-deblocked by base to give H-Cys(Acm)-D-Phe-Phe-D-Trp-Lys-Thr-Phe-Phe-D-Cys(Acm)-OH. The latter was Acm-deblocked by AgNO3 and then cyclized by oxidn. with K3[Fe(CN)6] to give **somatostatin** analog II. The insulin-, glucagon-, and growth hormone-inhibiting activities of four I were compared with those of **somatostatin**.

IT **51110-01-1DP**, analogs **89343-48-6P**

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and inhibition by, of release of insulin, glucagon, and growth hormone)

IT **89343-47-5P 89343-49-7P 89343-54-4P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

IT **9002-72-6**

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(secretion of, **somatostatin** analog inhibition of)

L38 ANSWER 30 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1984:875 HCAPLUS

DOCUMENT NUMBER: 100:875

TITLE: **Somatostatin** analogs: correlation between receptor binding affinity and biological potency in GH pituitary cells

AUTHOR(S): Schonbrunn, Agnes; Rorstad, O. P.; Westendorf, Joanne M.; Martin, Joseph B.

CORPORATE SOURCE: Lab. Toxicol., Harvard Sch. Public Health, Boston, MA, 02115, USA

SOURCE: Endocrinology (1983), 113(5), 1559-67

CODEN: ENDOAO; ISSN: 0013-7227

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The relation between the apparent binding affinity and biol. potency of 19 **somatostatin** (SRIF) analogs in GH4C1 cells was studied. Receptor binding and biol. activity were assayed under identical conditions. A good relation was obsd. over a 10,000-fold range between the receptor binding affinities and biol. potencies of SRIF analogs. Modification at the C- and N-terminal regions of the SRIF mol. had minimal effects on binding to the receptor or potency to inhibit prolactin release. However, substitution of residues 6 through 10 or redn. of the disulfide bond resulted in a 100-fold or greater decrease in both activities. The N-terminal extended SRIF analogs, SRIF-28 [73032-94-7], [D-Trp22]SRIF-28 [77910-00-0], and SRIF-25 [76461-17-1], were all somewhat less potent than SRIF. These results strongly support the involvement of the characterized SRIF receptor in initiating the biol. actions of SRIF in GH4C1 cells and define the structural features of the SRIF mol. required for both receptor binding and activation.

IT **38916-34-6D**, analogs **40958-31-4 58100-03-1**

**58959-53-8 58959-60-7 58959-62-9**

**58959-64-1 58959-66-3 58959-68-5**

**58959-70-9 58959-72-1 58976-46-8**

**59481-23-1 59481-27-5 61518-61-4**

**72426-96-1 73032-94-7 76461-17-1**

77910-00-0

RL: PRP (Properties)

(biol. potency and receptor binding affinity of, structure in relation to)

L38 ANSWER 31 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1983:416698 HCAPLUS

DOCUMENT NUMBER: 99:16698

TITLE: Assignments of the 270 MHz PMR spectrum of **somatostatin** using pH titration, synthetic analogs and double resonance difference spectroscopy  
AUTHOR(S): Buffington, Lynn A.; Garsky, Victor; Rivier, Jean; Gibbons, William A.

CORPORATE SOURCE: Coll. Agric. Life Sci., Univ. Wisconsin, Madison, WI, USA

SOURCE: International Journal of Peptide &amp; Protein Research (1983), 21(3), 231-41

CODEN: IJPPC3; ISSN: 0367-8377

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The assignment procedure for the 270 MHz PMR spectrum in D2O of the 14 amino acid peptide hormone cyclic **somatostatin** [ **38916-34-6**], using a series of synthetic analogs in which a single amino acid residue was replaced by an alanine residue, is reported. The principal methods used were pH titrn. and extensive double resonance expts. (difference scalar decouplings and nuclear Overhauser effect measurements).IT **38916-34-6 58959-54-9 58959-60-7****58959-62-9 58959-64-1 58959-66-3****58959-68-5 58959-70-9 58959-72-1****61518-61-4**RL: BIOL (Biological study)  
(NMR spectra)

L38 ANSWER 32 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1983:406055 HCAPLUS

DOCUMENT NUMBER: 99:6055

TITLE: Pharmaceutically active peptides

INVENTOR(S): Brown, Marvin R.; Rivier, Jean E. F.; Vale, Wylie W., Jr.

PATENT ASSIGNEE(S): Salk Institute for Biological Studies, USA

SOURCE: U.S., 6 pp. Cont.-in-part of U.S. Ser. No. 602,259, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4372884	A	19830208	US 1976-675149	19760408
ZA 7604183	A	19780125	ZA 1976-4183	19760714
IL 50047	A1	19790531	IL 1976-50047	19760715
CA 1125282	A1	19820608	CA 1976-258076	19760729
DE 2634416	A1	19770224	DE 1976-2634416	19760730
AU 504070	B2	19791004	AU 1976-16436	19760730
BE 844837	A1	19761201	BE 1976-169517	19760803
FR 2320108	A1	19770304	FR 1976-23659	19760803
FR 2320108	B1	19800418		
DK 7603515	A	19770207	DK 1976-3515	19760804
CH 623806	A	19810630	CH 1976-9945	19760804
FI 7602252	A	19770207	FI 1976-2252	19760805



SE 7608794	A	19770207	SE 1976-8794	19760805
NO 7602716	A	19770208	NO 1976-2716	19760805
GB 1551929	A	19790905	GB 1976-32686	19760805
NL 7608764	A	19770208	NL 1976-8764	19760806
PRIORITY APPLN. INFO.:			US 1975-602259	19750806
			US 1976-675149	19760408

- AB **Somatostatin** analogs R-Cys(R1)-Lys-X-Phe-Phe-D-Trp-Lys-Thr-Phe-Thr-Ser-Cys(R2)-OH (R = aminoacyl, peptidyl, aliph., arom., or cyclic acyl; R1 = R2 = H, R1R2 = bond; X = Ala, Asn) were prepd. as inhibitors of the release of growth hormone (GH), glucagon, and insulin. Thus, D-Trp8-**somatostatin** (I) was prepd. by the solid-phase method. D-Ala2-**somatostatin** at 100 mg/100 g BW inhibited the release of GH with a relative potency of 103% compared to 100% for **somatostatin**.
- IT 58959-53-8 58959-54-9 58959-60-7  
58959-62-9 58959-64-1 58959-66-3  
58959-68-5 58959-70-9 58959-72-1  
58976-47-9  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(growth hormone release-inhibiting activity of)
- IT 51110-01-1DP, analogs  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and growth hormone release-inhibiting activity of)
- IT 58976-46-8P 65375-80-6P 71459-94-4P  
85774-94-3P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)
- IT 9002-72-6  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(release of, **somatostatin** analog inhibition of)

L38 ANSWER 33 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1983:210168 HCAPLUS

DOCUMENT NUMBER: 98:210168

TITLE: Effects of different radioligands on the antigen binding specificity of **somatostatin** antisera Rorstad, O. P.

AUTHOR(S):  
CORPORATE SOURCE: Dep. Med., Univ. Calgary, Calgary, AB, T2N 4N1, Can.  
SOURCE: Journal of Immunoassay (1983), 4(1), 49-63

DOCUMENT TYPE: Journal  
CODEN: JOUIDK; ISSN: 0197-1522

LANGUAGE: English

- AB The regions of the **somatostatin** (SRIF) [51110-01-1] mol. recognized by 5 antisera were systematically studied using 3 radioligands (125I-labeled N-tyrosine-SRIF [58100-03-1], 125I-labeled 1-tyrosine-SRIF [59481-23-1], and 125I-labeled 11-tyrosine-SRIF [59481-27-5] and SRIF analogs contg. sequential substitutions with alanine or tyrosine. Antisera produced in female sheep and moreso antisera(SB) produced in male sheep had N-terminal specificity when used with 125I-11-tyrosine-SRIF but central mol. specificity when studied with the 2 N-terminal radiolabeled analogs. The N-terminal and central specific populations of antibodies in antiserum SB were separable by immunoaffinity adsorption using immobilized 1-tyrosine-SRIF. It is of practical significance that the same antiserum (SB) could be used with different radioligands to perform N-terminal and central specific RIAs. The central specific RIA detected SRIF-14 and SRIF-28 [73032-94-7] on an approx. equimolar basis whereas the N-terminal specific RIA was selective for SRIF-14.

- IT 51110-01-1  
RL: BIOL (Biological study)  
(antiserum to, structure specificity of)

- IT 40958-31-4 58100-03-1 58959-53-8  
58959-60-7 58959-62-9 58959-64-1  
58959-66-3 58959-68-5 58959-70-9

58959-72-1 59481-23-1 59481-27-5

61518-61-4 72426-96-1 73032-94-7

RL: PROC (Process)

(somatostatin antiserum binding of, structure in relation to)

L38 ANSWER 34 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1983:191905 HCAPLUS

DOCUMENT NUMBER: 98:191905

TITLE: Structure-activity relationships of  
**somatostatin** analogs in the rabbit ileum and  
the rat colonAUTHOR(S): Rosenthal, Linda E.; Yamashiro, Darrell J.; Rivier,  
Jean; Vale, Wylie; Brown, Marvin; Dharmasathaphorn,  
KiartisnCORPORATE SOURCE: Dep. Med., Univ. California, San Diego, La Jolla, CA,  
92037, USASOURCE: Journal of Clinical Investigation (1983), 71(4), 840-9  
CODEN: JCINAO; ISSN: 0021-9738

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Since cyclic **somatostatin** [38916-34-6] increases absorption of electrolytes and inhibits diarrhea in patients with endocrine tumors and short bowel syndrome, an attempt was made to develop a gut-specific **somatostatin** analog. Each amino acid in the **somatostatin** mol. was replaced with L-alanine, deleted, or substituted with its D-isomer. The potency of each analog to stimulate ion transport in the rabbit ileum was then detd. using the modified Ussing chamber technique. The results were compared to the ability of each analog to inhibit the stimulated release of growth hormone [9002-72-6] from cultured rat anterior pituitary cells and to inhibit the arginine-stimulated release of insulin [9004-10-8] and glucagon [9007-92-5] in the rat in vivo. Analogs that showed gut selectivity were then tested for their ion transport properties in the rat colon. Substitution with L-alanine or deletion of the amino acid at position 6, 7, 8, or 9 and deletion of 10-threonine produced analogs with ion transport properties reduced to <4% of **somatostatin's** action. The substitution also markedly reduced the ability of the compds. to inhibit the release of the growth hormone, insulin, and glucagon. Selectivity of intestinal ion transport was achieved by any one of the following alterations: L-alanine substitution at 11-phenylalanine, deletion of 11-phenylalanine, substitution with D-lysine at 4-lysine, or substitution with L-alanine at 4-lysine. These compds. had intestinal ion transport properties of 52, 34, 139, and 94%, resp., while demonstrating little or no inhibition of growth hormone, insulin or glucagon release. Thus, 6-phenylalanine, 7-phenylalanine, 8-tryptophan, and 9-lysine are required for the ion transport and other biol. actions of **somatostatin**, whereas 10-threonine serves as an essential spacer. Alteration at 11-phenylalanine or 4-lysine yields analogs that are selective for ion transport in the rabbit ileum and rat colon.

IT 54518-51-3 54786-81-1 56649-54-8  
56649-55-9 58383-28-1 58959-53-8  
58959-54-9 58959-60-7 58959-62-9  
58959-64-1 58959-66-3 58959-68-5  
58959-70-9 58959-72-1 58976-46-8  
59038-84-5 61425-92-1 61518-61-4  
61557-10-6 64813-73-6 64813-74-7  
64813-76-9 65330-61-2 66610-27-3  
66610-29-5 66610-30-8 70952-37-3  
72426-96-1 72426-97-2 72541-25-4  
75105-83-8 75105-94-1 77891-43-1  
79232-04-5 85734-73-2 85734-74-3  
85734-76-5 85734-77-6 85734-78-7  
85734-79-8 85734-82-3 85734-83-4

85734-84-5 85734-85-6 85748-23-8

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(electrolyte absorption stimulation by, in intestine)

IT 38916-34-6

RL: BIOL (Biological study)

(electrolyte transport by intestine in response to, structure in relation to)

IT 9002-72-6

RL: BIOL (Biological study)

(secretion of, **somatostatin** inhibition of, structure in relation to)

L38 ANSWER 35 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1982:485661 HCAPLUS

DOCUMENT NUMBER: 97:85661

TITLE: Characterization, regional distribution, and subcellular distribution of 125I-Tyr1-

**somatostatin** binding sites in rat brain

AUTHOR(S): Epelbaum, J.; Arancibia, L. Tapia; Kordon, C.; Enjalbert, A.

CORPORATE SOURCE: Cent. Paul Broca, INSERM, Paris, 75014, Fr.

SOURCE: Journal of Neurochemistry (1982), 38(6), 1515-23

CODEN: JONRA9; ISSN: 0022-3042

DOCUMENT TYPE: Journal

LANGUAGE: English

AB 125I-labeled Tyr-**somatostatin** [59481-23-1] binds reversibly, in a saturable manner, and with high affinity to membranes from rat brain. Kinetic and satn. data measured at equil. lead to KD values of 0.4 nM for cortical membranes. The binding was unaffected by 7 neuropeptides and drugs unrelated structurally to **somatostatin** (SRIF) [51110-01-1] while native SRIF, Tyr1-SRIF, and D-Trp-D-Cys14-SRIF [61950-59-2] displace 125I-Tyr1-SRIF in a dose-dependent manner, with Ki of 0.23 nM, 0.90 nM, and 0.11 nM, resp. Binding sites for 125I-Tyr1-SRIF were found in 9 of 11 central structures; there was a correlation between binding capacity and endogenous SRIF levels measured by radioimmunoassay. In the structures contg. the most binding sites, the cortex and preoptic area, Scatchard anal. suggests a single population of sites with apparent affinities of 0.8 nM and 1.4 nM, resp. Subcellular fractionation of these 2 regions reveals that >60% of 125I-Tyr1-SRIF specific binding of the homogenate is in the crude mitochondrial pellet (P2), which contains synaptosomes. When P2 is further fractionated on a discontinuous sucrose gradient, most of the initial P2 binding is recovered from membrane fractions. Each of 9 SRIF analogs, with a single alanine substitution, displaces 125I-Tyr1-SRIF binding on cortical membranes in the same order of potency as on adenohypophyseal membranes. Thus, SRIF binding sites are present in the rat brain, with kinetic characteristics comparable to those found in the adenohypophysis, and they provide a biochem. basis for the multiple functions of SRIF in brain.

IT 59481-23-1

RL: BIOL (Biological study)

(brain cortex membrane binding of, characterization of)

IT 51110-01-1

RL: BIOL (Biological study)

(receptors for, of brain cortex membranes, characterization of)

IT 58959-53-8 58959-54-9 58959-60-7

58959-62-9 58959-64-1 58959-66-3

58959-68-5 58959-70-9 61950-59-2

72426-96-1

RL: BIOL (Biological study)

(**somatostatin** analog binding by brain membrane inhibition by)

L38 ANSWER 36 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1982:401112 HCAPLUS

DOCUMENT NUMBER: 97:1112

TITLE: **Somatostatin** receptors on rat anterior pituitary membranes

AUTHOR(S): Enjalbert, A.; Tapia-Arancibia, L.; Rieutort, M.; Brazeau, P.; Kordon, C.; Epelbaum, J.

CORPORATE SOURCE: Cent. Paul Broca, INSERM, Paris, 75014, Fr.

SOURCE: Endocrinology (1982), 110(5), 1634-40

CODEN: ENDOAO; ISSN: 0013-7227

DOCUMENT TYPE: Journal

LANGUAGE: English

AB 125I-labeled Tyr1-**somatostatin** (Tyr1-SRIF) [59481-23-1

] binds with high affinity to 1 class of sites in the rat anterior pituitary with a KD of 0.91 nM and a receptor concn. of 104.4 fmol/mg protein. This binding is saturable with respect to tissue concn. and is time-, temp-, pH-, and Ca-dependent. It is also reversible as a function of time. The rates of assocn. and dissocn. were calcd. to be 5.98 .times. 1207/M/min and 0.578/min, resp. Binding of [125I]iodo-Tyr1-SRIF is not inhibited by morphine, .beta.-endorphin, [D-Ala2]methionine-enkephalin, LH-RH, TRH, histidylproline diketopiperazine, neurotensin, substance P, bombesin, or VIP. In contrast, SRIF [51110-01-1], Tyr1-SRIF, and [D-Trp8,D-Cys14]SRIF [61950-59-2] displace [125I]iodo-Tyr1-SRIF binding with Ki values 0.10, 0.46, 0.05 nM, resp. The consts. of inhibition of a series of alanine monosubstituted analogs of SRIF are correlated with their biol. potency on growth hormone (GH) [9002-72-6] secretion. Postnatal development patterns of [125I]iodo-Tyr1-SRIF binding sites follow the ability of SRIF to inhibit GH release. Thus, [125I]iodo-Tyr1-SRIF binding to adenohypophyseal membranes seems to reflect interaction with SRIF receptors on adenohypophyseal cells. Since biol. effects of the peptide have been reported on GH, TSH, and prolactin secretion, further studies are required to det. the cell types on which this binding occurs.

IT 61950-59-2

RL: BIOL (Biological study)

(Tyr1-**somatostatin** displacement from pituitary receptors by)

IT 58959-53-8 58959-54-9 58959-60-7

58959-62-9 58959-64-1 58959-66-3

58959-68-5 58959-70-9 72426-96-1

RL: BIOL (Biological study)

(growth hormone release inhibition by, receptor binding by anterior pituitary in relation to)

IT 51110-01-1D, analogs

RL: BIOL (Biological study)

(growth hormone secretion inhibition by, receptor binding by anterior pituitary in relation to)

IT 51110-01-1

RL: BIOL (Biological study)

(receptors for, of anterior pituitary gland)

IT 59481-23-1

RL: BIOL (Biological study)

(receptors for, of anterior pituitary membranes)

IT 9002-72-6

RL: BIOL (Biological study)

(release of, **somatostatin** analogs inhibition of, anterior pituitary binding in relation to)

L38 ANSWER 37 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1981:604447 HCAPLUS

DOCUMENT NUMBER: 95:204447

TITLE: Cyclooctapeptides and pharmaceutical preparations thereof

INVENTOR(S): Sieber, Peter; Kamber, Bruno; Rink, Hans  
 PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.  
 SOURCE: Eur. Pat. Appl., 41 pp.  
 DOCUMENT TYPE: CODEN: EPXXDW  
 LANGUAGE: Patent  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION: German

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 31303	A2	19810701		
EP 31303	A3	19811104	EP 1980-810395	19801215
R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
DD 155985	C	19820721	DD 1980-226093	19801215
US 4358439	A	19821109	US 1980-216353	19801215
FI 8003935	A	19810622	FI 1980-3935	19801217
DK 8005436	A	19810622	DK 1980-5436	19801219
NO 8003883	A	19810622	NO 1980-3883	19801219
AU 8065612	A1	19810625	AU 1980-65612	19801219
AU 535632	B2	19840329		
ZA 8007970	A	19820127	ZA 1980-7970	19801219
ES 497974	A1	19820501	ES 1980-497974	19801219
JP 56097259	A2	19810805	JP 1980-179735	19801220
			CH 1979-11409	19791221

## PRIORITY APPLN. INFO.:

GI For diagram(s), see printed CA Issue.

AB **Somatostatin** analogs I [X = D or L-Trp; X1 = Phe, D-Phe, L-NH-CHPhCO (Phg), D-Phg; X2 = .gamma.- or .delta.-aminoalkanoic acid residue; R = acyl] were prepd. Thus, H-Phe-Phe-D-Trp-Lys(BOC)-Thr(CMe3)-Phe-Phe-NH(CH2)3CO2H (BOC = Me3CO2C) was prepd. by std. peptide synthetic methods and then treated with dicyclohexylcarbodiimide/hydroxybenzotriazole for 18 h at 50.degree. to give cyclo[Phe-Phe-D-Trp-Lys(BOC)-Thr(CMe3)-Phe-Phe-NH(CH2)3CO] which was deblocked to give I [X = D-Trp, X1 = Phe, X2 = NH(CH2)3CO, R = H].

IT 79775-25-0P 79775-27-2P 79814-96-3P  
 79814-97-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

IT 51110-01-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of analogs of)

L38 ANSWER 38 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1980:37029 HCAPLUS

DOCUMENT NUMBER: 92:37029

TITLE: Chromatographic and biological properties of immunoreactive **somatostatin** in hypothalamic and extrahypothalamic brain regions of the rat  
 Rorstad, O. P.; Epelbaum, J.; Brazeau, P.; Martin, J. B.

AUTHOR(S):  
 CORPORATE SOURCE: Dep. Exp. Med., McGill Univ., Montreal, QC, Can.  
 SOURCE: Endocrinology (1979), 105(5), 1083-92

DOCUMENT TYPE: CODEN: ENDOAO; ISSN: 0013-7227

LANGUAGE: Journal  
 English

AB A sheep antiserum to **somatostatin** [38916-34-6] was used to develop radioimmunoassay and immunoaffinity chromatog. methods for the study of immunoreactive **somatostatin** (IRS) in brain tissue. IRS extd. from rat median eminence, anterior hypothalamic-preoptic area, amygdala, and parietal cortex bound reversibly to immunoaffinity columns, providing a technique for concn. and partial purifn. Immunoaffinity purified IRS from each of the 4 brain regions eluted as 4 peaks on gel filtration chromatog. Each peak possessed biol. activity, as detd. by

inhibitory effects on the release of growth hormone [9002-72-6] from cultured rat anterior pituitary cells. No differences were detected by the methods employed between IRS from the anterior hypothalamic-preoptic area, which is rich in IRS-contg. neuronal cell bodies, and that from the median eminence, where IRS is localized predominantly in nerve terminals.

IT 38916-34-6  
RL: ANT (Analyte); ANST (Analytical study)  
(detn. of, by immuno methods)

IT 9002-72-6  
RL: ANST (Analytical study)  
(release of, **somatostatin** stimulation of, immunomethod for detn. of)

IT 54518-52-4 56612-47-6 56612-53-4  
58959-53-8 58959-54-9 58959-60-7  
58959-62-9 58959-64-1 58959-66-3  
58959-68-5 58959-70-9 59481-23-1  
61518-59-0 61518-61-4 62406-11-5  
62406-12-6 62406-14-8 62437-57-4  
62802-82-8 63328-61-0 72426-96-1  
72426-97-2 72426-98-3

RL: ANST (Analytical study)  
(**somatostatin** antiserum crossreactivity with)

L38 ANSWER 39 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1977:453595 HCAPLUS  
DOCUMENT NUMBER: 87:53595

TITLE: **Somatostatin** peptides  
INVENTOR(S): Brown, Marvin Ross; Rivier, Jean Edouard Frederic;  
Vale, Wylie Walker, Jr.  
PATENT ASSIGNEE(S): Salk Institute for Biological Studies, USA  
SOURCE: Ger. Offen., 23 pp.  
CODEN: GWXXBX  
Patent  
German

DOCUMENT TYPE:  
LANGUAGE:  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2634416	-----	-----	DE 1976-2634416	19760730
US 4372884	A1	19770224	US 1976-675149	19760408
PRIORITY APPLN. INFO.:	A	19830208	US 1975-602259	19750806
			US 1976-675149	19760408

GI For diagram(s), see printed CA Issue.  
AB 8-D-tryptophan-**somatostatin** (I) (D-Trp8-SRIF) was prepd. by the solid-phase method using dicyclohexylcarbodiimide coupling as an inhibitor of secretion of growth hormone (GH), insulin, and glucagon. The in vivo effect of Ala2-SRIF and D-Ala2-SRIF on GH release and arginine-induced insulin and glucagon secretion are given. The effect of Alam-SRIF (m = 5, 6, 7, 8, 10, 12, 13) on the in vivo secretion of GH and insulin are also given.

IT 58959-53-8 58976-47-9  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(growth hormone and insulin and glucagon secretion in response to)

IT 58959-54-9  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(growth hormone and insulin secretion in response to)

IT 51110-01-1DP, analogs 58976-46-8P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and growth hormone and insulin and glucagon secretion in response to)

IT 58959-60-7P 58959-62-9P 58959-64-1P  
58959-66-3P 58959-68-5P 58959-70-9P  
58959-72-1P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

IT 9002-72-6  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(release of, **somatostatin** analogs effect on)

L38 ANSWER 40 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1977:38829 HCAPLUS  
DOCUMENT NUMBER: 86:38829

TITLE: Anatomic and phylogenetic distribution of  
**somatostatin**

AUTHOR(S): Vale, Wylie; Ling, Nick; Rivier, Jean; Villarreal,  
Jose; Rivier, Catherine; Douglas, Carolyn; Brown,  
Marvin

CORPORATE SOURCE: Lab. Neuroendocrinol., Salk Inst., La Jolla, CA, USA  
SOURCE: Metabolism, Clinical and Experimental (1976), 25(11,  
Suppl. 1), 1491-4

DOCUMENT TYPE: CODEN: METAAJ; ISSN: 0026-0495

LANGUAGE: Journal  
English

AB Immunoreactive **somatostatinlike** activity (SLA) was found in the  
brain, pancreas, and gastrointestinal trace of all animal species examd.  
(rat, pigeon, frog, catfish, torpedo, and hagfish). The highest concn. of  
SLA in the rat occurred in the hypothalamus, although the gastrointestinal  
tract contained the greatest amt. of total SLA. The pigeon pancreas had  
both the highest SLA concn. and amt. per tissue of any of the tissues (or  
species) tested. Thus, **somatostatin**, or substances closely  
related to it, has a widespread anatomical and phylogenetic distribution.  
As detd from the immunol. and biol. potencies of various  
**somatostatin** analogs used in different radioimmunoassays, biol.  
potency is apparently dependent upon the residues Phe6-Lys9 and Phe11 in  
the **somatostatin** mol. However, there were considerable  
differences between the **somatostatin** recognition sites of each  
of the 3 antiserum used and the **somatotroph** receptors. The SLA  
in crude exts. of the tissues examd. exhibited different chromatog. and  
soly. characteristics. However, radioimmunoassay of an ovine hypothalamus  
chromatog. prep. of **somatostatin** with different antisera  
indicated considerable homol. between mols. responsible for SLA and  
**somatostatin** activity in a variety of tissues and species.

IT 38916-34-6 54518-51-3 58290-23-6  
58959-53-8 58959-54-9 58959-60-7  
58959-62-9 58959-64-1 58959-66-3  
58959-68-5 58959-70-9 58976-46-8  
59061-34-6 59481-23-1 59481-27-5  
61518-59-0 61518-60-3 61518-61-4  
61518-62-5 61518-63-6

RL: BIOL (Biological study)  
(growth hormone release-inhibiting activity of)

IT 38916-34-6  
RL: PROC (Process)  
(phylogenetic and tissue distribution of)

L38 ANSWER 41 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1976:159897 HCAPLUS  
DOCUMENT NUMBER: 84:159897

TITLE: Biological activity of **somatostatin** and  
**somatostatin** analogs on inhibition of  
arginine-induced insulin and glucagon release in the  
rat

AUTHOR(S): Brown, Marvin; Rivier, Jean; Vale, Wylie

CORPORATE SOURCE: Salk Inst. Biol. Stud., La Jolla, CA, USA  
 SOURCE: Endocrinology (1976), 98(2), 336-43  
 CODEN: ENDOAO; ISSN: 0013-7227

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Cyclic **somatostatin** [38916-34-6] and **dihydrosomatostatin** [40958-31-4] (H2-**somatostatin**) were equipotent in inhibiting insulin [9004-10-8] and glucagon [9007-92-5] release induced by arginine in the rat. The ID50 of H2-**somatostatin** on insulin and glucagon secretion induced by arginine are 14 and 6 .mu.g/100 g resp. similar to the ID50 of H2-**somatostatin** (18 .mu.g/100 g) on inhibition of insulin release induced by glucose. With the exception of Ala2-**somatostatin** [58959-53-8] and Ala5-**somatostatin** [58959-54-9], alanine substituted analogs of **somatostatin** were less potent than **somatostatin**. D-Trp8-**somatostatin** [58976-46-8] was 6-8 times as potent as **somatostatin** in inhibiting insulin and glucagon release induced by arginine. The relative potencies of these analogs to inhibit the secretion of the pancreatic hormones are in good agreement with the previously reported values based on the inhibition of GH secretion in vitro.

IT 50997-12-1 56637-27-5 58959-55-0  
 58959-56-1 58959-57-2 58959-58-3  
 58959-59-4 58959-60-7 58959-61-8  
 58959-62-9 58959-63-0 58959-64-1  
 58959-65-2 58959-66-3 58959-67-4  
 58959-68-5 58959-69-6 58959-70-9  
 58959-71-0 58959-72-1 58976-47-9  
 59061-34-6

RL: BIOL (Biological study)  
 (glucagon and insulin release inhibition by)

IT 40958-31-4  
 RL: BIOL (Biological study)  
 (glucagon and insulin secretion inhibition by)

IT 38916-34-6  
 RL: BIOL (Biological study)  
 (glucagon and insulin secretion inhibition by, analogs in relation to)

IT 58959-53-8 58959-54-9 58976-46-8  
 RL: BIOL (Biological study)  
 (glucagon and insulin secretion inhibition by, **somatostatin** in relation to)

=>

=>

=> fil reg

FILE 'REGISTRY' ENTERED AT 11:21:04 ON 22 JUL 2003  
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 DICTIONARY FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

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Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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FILE COVERS 1907 - 22 Jul 2003 VOL 139 ISS 4  
FILE LAST UPDATED: 21 Jul 2003 (20030721/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> select hit rn 138 1-41  
E48 THROUGH E306 ASSIGNED

=>  
=>

=> fil reg  
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STRUCTURE FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7  
DICTIONARY FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> d .seq 139 1 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115  
120 125

L39 ANSWER 1 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 204388-11-4 REGISTRY  
 CN Cyclo(4-aminobutanoyl-L-phenylalanyl-L-phenylalanyl-5-fluoro-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-L-phenylalanyl) (9CI)  
 (CA INDEX NAME)

## OTHER NAMES:

CN 101: PN: US6268342 SEQID: 108 claimed protein  
 CN 97: PN: US20020042374 PAGE: 10 claimed protein  
 NTE cyclic  
 modified (modifications unspecified)

type	location		description
uncommon	Oaa-5	-	-
modification	Trp-8	-	fluoro<F>

SQL 8  
 RN 204388-11-4 REGISTRY  
 CN Cyclo(4-aminobutanoyl-L-phenylalanyl-L-phenylalanyl-5-fluoro-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-L-phenylalanyl) (9CI)  
 (CA INDEX NAME)

SQL 8

SEQ 1 KTFFXFFW

=====

HITS AT: 1-4, 6-8

## \*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 137:295256

REFERENCE 2: 136:304089

REFERENCE 3: 135:132468

REFERENCE 4: 131:295567

REFERENCE 5: 130:20992

REFERENCE 6: 130:20991

REFERENCE 7: 128:226683

L39 ANSWER 5 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN

RN 179530-41-7 REGISTRY

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-lysyl-L-.alpha.-asparagine (9CI) (CA INDEX NAME)

## OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-lysyl-L-.alpha.-asparagine

NTE multichain

cyclic, linear

modified (modifications unspecified)

type	location		description
bridge	Hcy-1	- Maa-1'	carba sulfide bridge
uncommon	Hcy-1	-	-
uncommon	Maa-1'	-	-

stereo                      Trp-4                      -                      D

SQL 12,6,6  
 RN 179530-41-7 REGISTRY  
 CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-lysyl-L-.alpha.-asparagine (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-lysyl-L-.alpha.-asparagine  
 SQL 12,6,6

SEQ 1 XFYWKV

=====

HITS AT: 1-2, 2-6

REFERENCE 1: 125:52519

L39 ANSWER 10 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN

RN 177789-11-6 REGISTRY

CN L-Lysinamide, N6-(mercaptoacetyl)-L-lysyl-L-lysyl-L-cysteinyl-L-lysyl-L-arginyl-L-alanyl-L-leucyl-L-valyl-L-.alpha.-aspartyl-L-threonyl-L-leucyl-L-lysyl-L-phenylalanyl-L-valyl-L-threonyl-L-glutaminyl-L-alanyl-L-.alpha.-glutamylglycyl-L-alanyl-, (1.fwdarw.1')-thioether with cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN L-Lysinamide, N6-(mercaptoacetyl)-L-lysyl-L-lysyl-L-cysteinyl-L-lysyl-L-arginyl-L-alanyl-L-leucyl-L-valyl-L-.alpha.-aspartyl-L-threonyl-L-leucyl-L-lysyl-L-phenylalanyl-L-valyl-L-threonyl-L-glutaminyl-L-alanyl-L-.alpha.-glutamylglycyl-L-alanyl-, (1.fwdarw.1')-sulfide with cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl)

NTE multichain

linear,cyclic,linear

modified (modifications unspecified)

type	-----	location	-----	description
bridge	Lys-1	-	Maa-1''	amide bridge
bridge	Hcy-1'	-	Maa-1''	carba sulfide bridge
uncommon	Hcy-1'	-	-	-
uncommon	Maa-1''	-	-	-
stereo	Trp-4'	-	D	

SQL 28,21,6,1

RN 177789-11-6 REGISTRY

CN L-Lysinamide, N6-(mercaptoacetyl)-L-lysyl-L-lysyl-L-cysteinyl-L-lysyl-L-arginyl-L-alanyl-L-leucyl-L-valyl-L-.alpha.-aspartyl-L-threonyl-L-leucyl-L-lysyl-L-phenylalanyl-L-valyl-L-threonyl-L-glutaminyl-L-alanyl-L-.alpha.-glutamylglycyl-L-alanyl-, (1.fwdarw.1')-thioether with cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN L-Lysinamide, N6-(mercaptoacetyl)-L-lysyl-L-lysyl-L-cysteinyl-L-lysyl-L-arginyl-L-alanyl-L-leucyl-L-valyl-L-.alpha.-aspartyl-L-threonyl-L-leucyl-L-lysyl-L-phenylalanyl-L-valyl-L-threonyl-L-glutaminyl-L-alanyl-L-.alpha.-glutamylglycyl-L-alanyl-, (1.fwdarw.1')-sulfide with cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl)

SQL 28,21,6,1

SEQ 1 XFYWKV  
 =====  
 HITS AT: 1-2, 2-6

REFERENCE 1: 125:52519

L39 ANSWER 15 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN

RN 177789-00-3 REGISTRY

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N5-(mercaptoacetyl)-L-ornithylglycyl-L-cysteinyl-L-aspartamide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N5-(mercaptoacetyl)-L-ornithylglycyl-L-cysteinyl-L-aspartamide

NTE multichain  
 cyclic, linear, linear  
 modified (modifications unspecified)

type	-----	location	-----	description
bridge	Hcy-1	-	Maa-1''	carba sulfide bridge
bridge	Orn-1'	-	Maa-1''	amide bridge
uncommon	Hcy-1	-	-	-
uncommon	Orn-1'	-	-	-
uncommon	Maa-1''	-	-	-
stereo	Trp-4	-	-	D

SQL 11,6,4,1

RN 177789-00-3 REGISTRY

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N5-(mercaptoacetyl)-L-ornithylglycyl-L-cysteinyl-L-aspartamide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N5-(mercaptoacetyl)-L-ornithylglycyl-L-cysteinyl-L-aspartamide

SQL 11,6,4,1

SEQ 1 XFYWKV

=====

HITS AT: 1-2, 2-6

REFERENCE 1: 125:52519

L39 ANSWER 20 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN

RN 177788-95-3 REGISTRY

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-(mercaptoacetyl)glycyl-L-arginyl-L-cysteine (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)glycyl-L-arginyl-L-cysteine

NTE multichain  
 cyclic, linear  
 modified (modifications unspecified)

type	-----	location	-----	description
------	-------	----------	-------	-------------

	Hcy-1	- Maa-1'	carba sulfide bridge
bridge	Hcy-1	-	-
uncommon	Hcy-1	-	-
uncommon	Maa-1'	-	-
stereo	Trp-4	-	D

SQL 10,6,4

RN 177788-95-3 REGISTRY

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-(mercaptoacetyl)glycyl-L-arginyl-L-cysteine (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)glycyl-L-arginyl-L-cysteine

SQL 10,6,4

SEQ 1 XFYWKV

=====

HITS AT: 1-2, 2-6

REFERENCE 1: 125:52519

L39 ANSWER 25 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN

RN 177788-90-8 REGISTRY

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with 3-[(mercaptoacetyl)amino]-L-alanyl-L-arginyl-L-cysteinyl-L-lysineamide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with 3-[(mercaptoacetyl)amino]-L-alanyl-L-arginyl-L-cysteinyl-L-lysineamide

NTE multichain

cyclic,linear,linear

modified (modifications unspecified)

type	location	description
bridge	Hcy-1 - Maa-1''	carba sulfide bridge
bridge	Dpr-1' - Maa-1''	amide bridge
uncommon	Hcy-1 -	-
uncommon	Dpr-1' -	-
uncommon	Maa-1'' -	-
stereo	Trp-4 -	D

SQL 11,6,4,1

RN 177788-90-8 REGISTRY

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with 3-[(mercaptoacetyl)amino]-L-alanyl-L-arginyl-L-cysteinyl-L-lysineamide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with 3-[(mercaptoacetyl)amino]-L-alanyl-L-arginyl-L-cysteinyl-L-lysineamide

SQL 11,6,4,1

SEQ 1 XFYWKV

=====

HITS AT: 1-2, 2-6

REFERENCE 1: 125:52519

L39 ANSWER 30 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN

RN 177788-85-1 REGISTRY

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-(mercaptoacetyl)-L-seryl-L-seryl-L-cysteinamide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)-L-seryl-L-seryl-L-cysteinamide

NTE multichain

cyclic,linear

modified (modifications unspecified)

type	location	description
bridge	Hcy-1 - Maa-1'	carba sulfide bridge
uncommon	Hcy-1 -	-
uncommon	Maa-1' -	-
stereo	Trp-4 -	D

SQL 10,6,4

RN 177788-85-1 REGISTRY

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-(mercaptoacetyl)-L-seryl-L-seryl-L-cysteinamide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)-L-seryl-L-seryl-L-cysteinamide

SQL 10,6,4

SEQ 1 XFYWKV

=====

HITS AT: 1-2, 2-6

REFERENCE 1: 125:52519

L39 ANSWER 35 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN

RN 177788-80-6 REGISTRY

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N2-(mercaptoacetyl)-L-lysylglycyl-L-cysteinyl-L-lysineamide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N2-(mercaptoacetyl)-L-lysylglycyl-L-cysteinyl-L-lysineamide

NTE multichain

cyclic,linear

modified (modifications unspecified)

type	location	description
bridge	Hcy-1 - Maa-1'	carba sulfide bridge
uncommon	Hcy-1 -	-
uncommon	Maa-1' -	-
stereo	Trp-4 -	D

SQL 11,6,5

RN 177788-80-6 REGISTRY

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-

L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N2-(mercaptoacetyl)-L-lysylglycyl-L-cysteinyl-L-lysineamide (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N2-(mercaptoacetyl)-L-lysylglycyl-L-cysteinyl-L-lysineamide  
 SQL 11,6,5

SEQ 1 XFYWKV  
 =====  
 HITS AT: 1-2, 2-6

REFERENCE 1: 125:52519

L39 ANSWER 40 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 177788-70-4 REGISTRY

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with (2S)-2-amino-4-[(mercaptoacetyl)amino]butanoylglycyl-L-cysteinyl-L-lysineamide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N4-(mercaptoacetyl)-L-2,4-diaminobutanoylglycyl-L-cysteinyl-L-lysineamide

NTE multichain  
 cyclic,linear,linear  
 modified (modifications unspecified)

type	location	description
bridge	Hcy-1 - Maa-1''	carba sulfide bridge
bridge	Dab-1' - Maa-1''	amide bridge
uncommon	Hcy-1 -	-
uncommon	Dab-1' -	-
uncommon	Maa-1'' -	-
stereo	Trp-4 -	D

SQL 11,6,4,1

RN 177788-70-4 REGISTRY

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with (2S)-2-amino-4-[(mercaptoacetyl)amino]butanoylglycyl-L-cysteinyl-L-lysineamide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N4-(mercaptoacetyl)-L-2,4-diaminobutanoylglycyl-L-cysteinyl-L-lysineamide

SQL 11,6,4,1

SEQ 1 XFYWKV  
 =====  
 HITS AT: 1-2, 2-6

REFERENCE 1: 125:52519

L39 ANSWER 45 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN

RN 177788-61-3 REGISTRY

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-ornithyl-D-ornithinamide

(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-ornithyl-D-ornithinamide

NTE multichain  
linear, cyclic  
modified (modifications unspecified)

type	location	description
bridge	Maa-1 - Hcy-1'	carba sulfide bridge
uncommon	Maa-1 -	-
uncommon	Orn-5 -	-
uncommon	Orn-6 -	-
uncommon	Hcy-1' -	-
stereo	Orn-6 -	D
stereo	Trp-4' -	D

SQL 12,6,6

RN 177788-61-3 REGISTRY

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-ornithyl-D-ornithinamide

(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-ornithyl-D-ornithinamide

SQL 12,6,6

SEQ 1 XFYWKV

=====

HITS AT: 1-2, 2-6

REFERENCE 1: 125:52519

L39 ANSWER 50 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN

RN 174900-51-7 REGISTRY

CN Technetate(1-)-99Tc, [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-thioether with N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-argininamidato(4-)]oxo-, (SP-5-25)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Technetate(1-)-99Tc, [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-argininamidato(4-)]oxo-, (SP-5-25)-

NTE multichain  
cyclic, linear  
metal complex  
modified (modifications unspecified)

type	location	description
bridge	Hcy-1 - Maa-1'	sulfide bridge
uncommon	Hcy-1 -	-
uncommon	Maa-1' -	-
stereo	Trp-4 -	D

SQL 11,6,5

RN 174900-51-7 REGISTRY



CN Technetate(1-)-99Tc, [cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-thioether with N-(mercaptoacetyl)glycylglycyl-L-cysteinyL-L-argininamidato(4-)]oxo-, (SP-5-25)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Technetate(1-)-99Tc, [cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)glycylglycyl-L-cysteinyL-L-argininamidato(4-)]oxo-, (SP-5-25)-

SQL 11,6,5

SEQ 1 XFYWKV

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HITS AT: 1-2, 2-6

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 124:261669

L39 ANSWER 55 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN

RN 174900-46-0 REGISTRY

CN Rhenium, [cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-thioether with 3-[(mercaptoacetyl)amino]-L-alanyl-L-lysyl-L-cysteinyL-L-lysineamidato(3-)]oxo-, (SP-5-24)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Rhenium, [cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-sulfide with 3-[(mercaptoacetyl)amino]-L-alanyl-L-lysyl-L-cysteinyL-L-lysineamidato(3-)]oxo-, (SP-5-24)-

NTE multichain

cyclic,linear

metal complex

modified (modifications unspecified)

type	-----	location	-----	description
bridge	Hcy-1	-	Dpr-1'	covalent bridge
uncommon	Hcy-1	-	-	-
uncommon	Dpr-1'	-	-	-
stereo	Trp-4	-	-	D

SQL 10,6,4

RN 174900-46-0 REGISTRY

CN Rhenium, [cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-thioether with 3-[(mercaptoacetyl)amino]-L-alanyl-L-lysyl-L-cysteinyL-L-lysineamidato(3-)]oxo-, (SP-5-24)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Rhenium, [cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-sulfide with 3-[(mercaptoacetyl)amino]-L-alanyl-L-lysyl-L-cysteinyL-L-lysineamidato(3-)]oxo-, (SP-5-24)-

SQL 10,6,4

SEQ 1 XFYWKV

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HITS AT: 1-2, 2-6

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 124:261669

L39 ANSWER 60 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN

RN 174900-41-5 REGISTRY

CN Rhenate(1-), [cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-thioether with N-(mercaptoacetyl)glycylglycyl-L-cysteinyL-L-arginyl-L-lysynamidato(4-)]oxo-, (SP-5-25)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Rhenate(1-), [cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)glycylglycyl-L-cysteinyL-L-arginyl-L-lysynamidato(4-)]oxo-, (SP-5-25)-

NTE multichain  
linear,cyclic  
metal complex  
modified (modifications unspecified)

type	----- location -----	description
bridge	Maa-1 - Hcy-1'	sulfide bridge
uncommon	Maa-1 -	-
uncommon	Hcy-1' -	-
stereo	Trp-4' -	D

SQL 12,6,6

RN 174900-41-5 REGISTRY

CN Rhenate(1-), [cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-thioether with N-(mercaptoacetyl)glycylglycyl-L-cysteinyL-L-arginyl-L-lysynamidato(4-)]oxo-, (SP-5-25)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Rhenate(1-), [cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)glycylglycyl-L-cysteinyL-L-arginyl-L-lysynamidato(4-)]oxo-, (SP-5-25)-

SQL 12,6,6

SEQ 1 XFYWKV

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HITS AT: 1-2, 2-6

REFERENCE 1: 124:261669

L39 ANSWER 65 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN

RN 174900-36-8 REGISTRY

CN Rhenium, [cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-thioether with N6-(mercaptoacetyl)-L-lysylglycyl-L-cysteinyL-L-lysyl-L-lysynamidato(3-)]oxo-, (SP-5-24)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Rhenium, [cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-sulfide with N6-(mercaptoacetyl)-L-lysylglycyl-L-cysteinyL-L-lysyl-L-lysynamidato(3-)]oxo-, (SP-5-24)-

NTE multichain  
cyclic,linear  
metal complex  
modified (modifications unspecified)

type	----- location -----	description
------	----------------------	-------------

bridge	Hcy-1	- Lys-1'	covalent bridge
uncommon	Hcy-1	-	-
stereo	Trp-4	-	D

SQL 11,6,5

RN 174900-36-8 REGISTRY

CN Rhenium, [cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-thioether with N6-(mercaptoacetyl)-L-lysylglycyl-L-cysteinyL-L-lysyl-L-lysinamidato(3-)]oxo-, (SP-5-24)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Rhenium, [cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-sulfide with N6-(mercaptoacetyl)-L-lysylglycyl-L-cysteinyL-L-lysyl-L-lysinamidato(3-)]oxo-, (SP-5-24)-

SQL 11,6,5

SEQ 1 XFYWKV

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HITS AT: 1-2, 2-6

REFERENCE 1: 124:261669

L39 ANSWER 70 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN

RN 174900-31-3 REGISTRY

CN Rhenate(1-), [cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-thioether with N-(mercaptoacetyl)glycylglycyl-L-cysteinyL-L-argininamidato(4-)]oxo-, (SP-5-25)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Rhenate(1-), [cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)glycylglycyl-L-cysteinyL-L-argininamidato(4-)]oxo-, (SP-5-25)-

NTE multichain

cyclic,linear

metal complex

modified (modifications unspecified)

type	-----	location	-----	description
bridge	Hcy-1	- Maa-1'		sulfide bridge
uncommon	Hcy-1	-		-
uncommon	Maa-1'	-		-
stereo	Trp-4	-		D

SQL 11,6,5

RN 174900-31-3 REGISTRY

CN Rhenate(1-), [cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-thioether with N-(mercaptoacetyl)glycylglycyl-L-cysteinyL-L-argininamidato(4-)]oxo-, (SP-5-25)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Rhenate(1-), [cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)glycylglycyl-L-cysteinyL-L-argininamidato(4-)]oxo-, (SP-5-25)-

SQL 11,6,5

SEQ 1 XFYWKV

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HITS AT: 1-2, 2-6

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 124:261669

L39 ANSWER 75 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN

RN 174900-26-6 REGISTRY

CN Rhenate(1-), [cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-thioether with N-(mercaptoacetyl)-L-cysteinyLglycyl-L-cysteinamidato(4-)]oxo-, (SP-5-35)-(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Rhenate(1-), [cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)-L-cysteinyLglycyl-L-cysteinamidato(4-)]oxo-, (SP-5-35)-

NTE multichain  
cyclic,linear  
metal complex  
modified (modifications unspecified)

type	-----	location	-----	description
bridge	Hcy-1	-	Maa-1'	sulfide bridge
uncommon	Hcy-1	-	-	-
uncommon	Maa-1'	-	-	-
stereo	Trp-4	-	-	D

SQL 10,6,4

RN 174900-26-6 REGISTRY

CN Rhenate(1-), [cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-thioether with N-(mercaptoacetyl)-L-cysteinyLglycyl-L-cysteinamidato(4-)]oxo-, (SP-5-35)-(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Rhenate(1-), [cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)-L-cysteinyLglycyl-L-cysteinamidato(4-)]oxo-, (SP-5-35)-

SQL 10,6,4

SEQ 1 XFYWKV

=====

HITS AT: 1-2, 2-6

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 124:261669

L39 ANSWER 80 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN

RN 174350-64-2 REGISTRY

CN Cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-(mercaptoacetyl)glycyl-L-cysteinyL-3-amino-L-alanyl-3-amino-L-alaninamide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)glycyl-L-cysteinyL-3-amino-L-alanyl-3-amino-L-alaninamide

OTHER NAMES:

CN 79: PN: WO02060491 PAGE: 50 claimed sequence

NTE multichain  
cyclic, linear  
modified (modifications unspecified)

type	location	description
bridge	Hcy-1 - Maa-1'	sulfide bridge
uncommon	Hcy-1 -	-
uncommon	Maa-1' -	-
uncommon	Dpr-4' -	-
uncommon	Dpr-5' -	-
stereo	Trp-4 -	D

SQL 11,6,5

RN 174350-64-2 REGISTRY

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-(mercaptoacetyl)glycyl-L-cysteinyl-3-amino-L-alanyl-3-amino-L-alaninamide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)glycyl-L-cysteinyl-3-amino-L-alanyl-3-amino-L-alaninamide

SQL 11,6,5

SEQ 1 XFYWKV

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HITS AT: 1-2, 2-6

REFERENCE 1: 139:12393

REFERENCE 2: 139:12392

REFERENCE 3: 138:316887

REFERENCE 4: 137:159312

REFERENCE 5: 124:212160

L39 ANSWER 85 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN

RN 174350-42-6 REGISTRY

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N6-[N2-(mercaptoacetyl)-L-lysyl]-L-lysyl-L-lysyl-L-cysteinyl-L-lysineamide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N6-[N2-(mercaptoacetyl)-L-lysyl]-L-lysyl-L-lysyl-L-cysteinyl-L-lysineamide

OTHER NAMES:

CN 87: PN: WO02060491 PAGE: 50 claimed sequence

NTE multichain  
cyclic, linear, linear  
modified (modifications unspecified)

type	location	description
bridge	Hcy-1 - Maa-1''	sulfide bridge
bridge	Lys-1' - Lys-2''	amide bridge
uncommon	Hcy-1 -	-
uncommon	Maa-1'' -	-
stereo	Trp-4 -	D

SQL 12,6,4,2  
RN 174350-42-6 REGISTRY  
CN Cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N6-[N2-(mercaptoacetyl)-L-lysyl]-L-lysyl-L-lysyl-L-cysteinyL-L-lysinaMide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N6-[N2-(mercaptoacetyl)-L-lysyl]-L-lysyl-L-lysyl-L-cysteinyL-L-lysinaMide

SQL 12,6,4,2

SEQ 1 XFYWKV

=====

HITS AT: 1-2, 2-6

REFERENCE 1: 139:12393

REFERENCE 2: 139:12392

REFERENCE 3: 138:316887

REFERENCE 4: 137:159312

REFERENCE 5: 125:52519

REFERENCE 6: 124:212160

L39 ANSWER 90 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN

RN 172485-59-5 REGISTRY

CN Cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N2-(mercaptoacetyl)-L-lysyl-L-arginyl-L-cysteinaMide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N2-(mercaptoacetyl)-L-lysyl-L-arginyl-L-cysteinaMide

NTE multichain  
cyclic, linear  
modified

type	location	description
terminal mod.	Cys-4'	C-terminal amide
bridge	Hcy-1 - Maa-1'	sulfide bridge
uncommon	Hcy-1	-
uncommon	Maa-1'	-
stereo	Trp-4	D

SQL 10,6,4

RN 172485-59-5 REGISTRY

CN Cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N2-(mercaptoacetyl)-L-lysyl-L-arginyl-L-cysteinaMide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyL-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N2-(mercaptoacetyl)-L-lysyl-L-arginyl-L-cysteinaMide

SQL 10,6,4

SEQ 1 XFYWKV  
=====

HITS AT: 1-2, 2-6

REFERENCE 1: 125:52519

REFERENCE 2: 124:169544

L39 ANSWER 95 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN

RN 172485-54-0 REGISTRY

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-lysyl-L-lysyl-L-lysineamide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-lysyl-L-lysyl-L-lysineamide

NTE multichain  
linear, cyclic  
modified

type	location	description
terminal mod.	Lys-7	C-terminal amide
bridge	Maa-1 - Hcy-1'	sulfide bridge
uncommon	Maa-1	-
uncommon	Hcy-1'	-
stereo	Trp-4'	D

SQL 13,7,6

RN 172485-54-0 REGISTRY

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-lysyl-L-lysyl-L-lysineamide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-lysyl-L-lysyl-L-lysineamide

SQL 13,7,6

SEQ 1 XFYWKV  
=====

HITS AT: 1-2, 2-6

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 125:52519

REFERENCE 2: 124:261669

REFERENCE 3: 124:169544

L39 ANSWER 100 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN

RN 161982-59-8 REGISTRY

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-argininamide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-argininamide  
 NTE multichain  
 cyclic, linear  
 modified

type	location	description
terminal mod.	Arg-5'	C-terminal amide
bridge	Hcy-1 - Maa-1'	sulfide bridge
uncommon	Hcy-1	-
uncommon	Maa-1'	-
stereo	Trp-4	D

SQL 11,6,5

RN 161982-59-8 REGISTRY

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-argininamide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-argininamide

SQL 11,6,5

SEQ 1 XFYWKV

HITS AT: 1-2, 2-6

## \*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 132:20545

REFERENCE 2: 131:327610

REFERENCE 3: 129:136495

REFERENCE 4: 125:52519

REFERENCE 5: 124:261669

REFERENCE 6: 124:197258

REFERENCE 7: 124:169545

REFERENCE 8: 124:169544

REFERENCE 9: 122:234388

L39 ANSWER 105 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN

RN 161982-30-5 REGISTRY

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-(mercaptoacetyl)-L-cysteinylglycyl-L-cysteine (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)-L-cysteinylglycyl-L-cysteine

NTE multichain  
 cyclic, linear



modified (modifications unspecified)

type	location	description
bridge	Hcy-1 - Maa-1'	sulfide bridge
uncommon	Hcy-1 -	-
uncommon	Maa-1' -	-
stereo	Trp-4 -	D

SQL 10,6,4

RN 161982-30-5 REGISTRY

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-(mercaptoacetyl)-L-cysteinylglycyl-L-cysteine (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)-L-cysteinylglycyl-L-cysteine

SQL 10,6,4

SEQ 1 XFYWKV

=====

HITS AT: 1-2, 2-6

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 134:300763

REFERENCE 2: 134:152627

REFERENCE 3: 132:119359

REFERENCE 4: 131:327610

REFERENCE 5: 125:52519

REFERENCE 6: 124:261669

REFERENCE 7: 122:234388

L39 ANSWER 110 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN

RN 142570-99-8 REGISTRY

CN Somatostatin (sheep), 12-L-alanine-, acetate (salt) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2-Dithia-5,8,11,14,17,20,23,26,29,32,35-

undecaazacyclooctatriacontane, cyclic peptide deriv.

NTE modified (modifications unspecified)

type	location	description
bridge	Cys-3 - Cys-14	disulfide bridge
modification	- -	undetermined modification

SQL 14

RN 142570-99-8 REGISTRY

OTHER CA INDEX NAMES:

CN 1,2-Dithia-5,8,11,14,17,20,23,26,29,32,35-

undecaazacyclooctatriacontane, cyclic peptide deriv.

SQL 14

SEQ 1 AGCKNFFWKT FASC

=====

HITS AT: 6-12

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

SEQ 1 AGCKNFFWKT FASC

=====

HITS AT: 6-12

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

SEQ 1 AGCKNFFWKT FASC

=====

HITS AT: 6-12

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 117:70317

L39 ANSWER 115 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN

RN 89343-54-4 REGISTRY

CN D-Cysteine, L-cysteiny-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-L-phenylalanyl-, cyclic  
(1.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2-Dithia-5,8,11,14,17,20,23,26-octaazacyclononacosane, cyclic  
peptide deriv.

NTE

type	----- location -----	description
bridge	Cys-1 - Cys-9	disulfide bridge

SQL 9

RN 89343-54-4 REGISTRY

CN D-Cysteine, L-cysteiny-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-L-phenylalanyl-, cyclic  
(1.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2-Dithia-5,8,11,14,17,20,23,26-octaazacyclononacosane, cyclic  
peptide deriv.

SQL 9

SEQ 1 CFFWKTFFC

=====

HITS AT: 2-8

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 103:135323

REFERENCE 2: 100:139624

L39 ANSWER 120 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN

RN 79814-97-4 REGISTRY

CN Cyclo(4-aminobutanoyl-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-L-phenylalanyl) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,4,7,10,13,16,19,22-Octaazacyclohexacosane, cyclic peptide deriv.

CN L-Phenylalanine, N-(4-amino-1-oxobutyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-, cyclic  
(7.fwdarw.1)-peptide

OTHER NAMES:

CN 95: PN: US20020042374 PAGE: 10 claimed protein  
CN 99: PN: US6268342 SEQID: 106 claimed protein  
NTE cyclic

type	location	description
uncommon	Oaa-5	-

SQL 8

RN 79814-97-4 REGISTRY

CN Cyclo(4-aminobutanoyl-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-L-phenylalanyl) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,4,7,10,13,16,19,22-Octaazacyclohexacosane, cyclic peptide deriv.

CN L-Phenylalanine, N-(4-amino-1-oxobutyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-, cyclic (7.fwdarw.1)-peptide

SQL 8

SEQ 1 KTFFXFFW

==== ==

HITS AT: 1-4, 6-8

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 137:295256

REFERENCE 2: 136:304089

REFERENCE 3: 135:132468

REFERENCE 4: 131:295567

REFERENCE 5: 130:20992

REFERENCE 6: 130:20991

REFERENCE 7: 128:226683

REFERENCE 8: 95:204447

L39 ANSWER 125 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN

RN 58959-70-9 REGISTRY

CN Somatostatin (sheep), 12-L-alanine- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2-Dithia-5,8,11,14,17,20,23,26,29,32,35-undecaazacyclooctatriacontane, cyclic peptide deriv.

OTHER NAMES:

CN [Ala12]Somatostatin

NTE

type	location	description
bridge	Cys-3 - Cys-14	disulfide bridge

SQL 14

RN 58959-70-9 REGISTRY

OTHER CA INDEX NAMES:

CN 1,2-Dithia-5,8,11,14,17,20,23,26,29,32,35-undecaazacyclooctatriacontane, cyclic peptide deriv.

SQL 14

SEQ 1 AGCKNFFWKT FASC

=====

HITS AT: 6-12

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

REFERENCE 1: 100:875

REFERENCE 2: 99:16698

REFERENCE 3: 99:6055

REFERENCE 4: 98:210168

REFERENCE 5: 98:191905

REFERENCE 6: 97:85661

REFERENCE 7: 97:1112

REFERENCE 8: 92:37029

REFERENCE 9: 87:53595

REFERENCE 10: 86:38829

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FILE COVERS 1907 - 22 Jul 2003 VOL 139 ISS 4  
FILE LAST UPDATED: 21 Jul 2003 (20030721/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L22 11 SEA FILE=HCAPLUS ABB=ON PLU=ON L20  
L23 5224 SEA FILE=REGISTRY ABB=ON PLU=ON SOMATO?  
L24 89156 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 OR ?SOMATO?  
L25 10 SEA FILE=HCAPLUS ABB=ON PLU=ON L22 AND L24

=>  
=>

=> d ibib abs hitrn 125 1-10

L25 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 2002:692513 HCAPLUS  
DOCUMENT NUMBER: 138:117735  
TITLE: Human **somatostatin** receptor specificity of backbone-cyclic analogs containing novel sulfur building units  
AUTHOR(S): Gazal, Sharon; Gellerman, Gary; Ziv, Ofer; Karpov, Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michel; Gilon, Chaim  
CORPORATE SOURCE: Department of Organic Chemistry, Hebrew University, Jerusalem, 91904, Israel  
SOURCE: Peptides: The Wave of the Future, Proceedings of the Second International and the Seventeenth American Peptide Symposium, San Diego, CA, United States, June 9-14, 2001 (2001), 626-627. Editor(s): Lebl, Michal; Houghten, Richard A. American Peptide Society: San Diego, Calif.  
CODEN: 69DBAL; ISBN: 0-9715560-0-8  
DOCUMENT TYPE: Conference  
LANGUAGE: English  
AB The synthesis and the biol. properties of novel disulfide bridged backbone cyclic **somatostatin** analogs were examd. These analogs were

prepd. to investigate the influence of the ring size and ring chem. on the binding profile of a parent analog named PTR 3173. PTR 3173 is 1000-fold more potent in the in vivo inhibition of growth hormone (GH) than of glucagon and 10,000-fold more potent inhibitor of GH than of insulin release. This pharmacol. property is ascribed to the unique binding profile of PTR 3173 and it was suggested that the binding to a specific combination of **somatostatin** receptors and not a single receptor detcs. the physiol. properties of the SST analog. Studies of binding of PTP 73 disulfide-bridged, backbone cyclic analogs to SSSTR receptors suggest the effect of ring chem., ring size, and ring position of the peptide template on receptor binding selectivity. The disulfide analogs of PTR 3173 were also highly resistant to a broad spectrum of proteolytic activity compared to **somatostatin** that was degraded within a few minutes.

IT 51110-01-1, **Somatostatin**-14

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(**somatostatin** receptor specificity of backbone-cyclic analogs  
contg. novel sulfur building units)

IT 51110-01-1D, **Somatostatin**-14, cyclic analogs

252845-37-7, PTR 3173 252845-42-4, PTR 3197

252845-43-5, PTR 3207 252845-44-6, PTR 3211

252845-45-7, PTR 3213 252845-46-8, PTR 3217

252845-47-9, PTR 3219 252845-48-0, PTR 3221

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL  
(Biological study)

(**somatostatin** receptor specificity of backbone-cyclic analogs  
contg. novel sulfur building units)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:615640 HCAPLUS

DOCUMENT NUMBER: 137:165559

TITLE: Backbone cyclized radiolabelled **somatostatin**  
analog

INVENTOR(S): Bonasera, Thomas A.; Livnah, Nurit; Yechezkel, Tamar;  
Salitra, Yoseph

PATENT ASSIGNEE(S): Peptor Ltd., Israel

SOURCE: PCT Int. Appl., 104 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002062819	A2	20020815	WO 2002-IL91	20020204
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: IL 2001-141276 A 20010205

OTHER SOURCE(S): MARPAT 137:165559

AB Novel radiodiagnostic and radiotherapeutic peptides which are conformationally constrained backbone cyclized **somatostatin** analogs, having improved **somatostatin** receptor subtype affinity

and selectivity are disclosed. The backbone cyclized peptide analogs disclosed possess unique and superior properties over other analogs, such as chem. and metabolic stability, selectivity, increased bioavailability and improved pharmacokinetics. Furthermore, the unique patterns of receptor subtype selectivity provide compounds having improved diagnostic and therapeutic utilities. Pharmaceutical compounds comprising the backbone cyclized **somatostatin** analogs and radiolabeled analogs, reagents for synthesizing same, and methods of using such compounds for radiodiagnostic and radiotherapeutic purposes are also disclosed.

IT 446311-45-1P 446311-46-2P 446311-47-3P  
 446311-49-5P 446311-50-8P 446311-52-0P  
 446311-53-1P 446311-54-2DP, complexes with Indium and DTPA 446311-55-3DP, complexes with Indium and DTPA  
 446311-56-4DP, complexes with Indium and DTPA  
 446311-57-5DP, complexes with Indium and DTPA  
 446311-58-6DP, complexes with Indium and DTPA  
 446311-59-7DP, complexes with Indium and DTPA 446311-60-0P  
 446311-61-1P 446311-62-2P 446311-63-3P  
 446311-64-4P 446311-65-5P 446311-66-6P  
 446311-67-7P 446311-68-8P 446311-69-9P  
 446311-70-2P 446311-71-3P 446311-72-4P  
 446311-73-5P 446311-74-6P 446311-75-7P  
 446311-76-8P 446862-79-9P 446862-80-2P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);  
 BIOL (Biological study); PREP (Preparation)  
 (backbone cyclized radiolabeled **somatostatin** analogs as potential imaging and therapeutic agents)

IT 51110-01-1DP, **Somatostatin**, radiolabeled analogs  
 RL: DGN (Diagnostic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (backbone cyclized radiolabeled **somatostatin** analogs as potential imaging and therapeutic agents)

IT 252845-37-7D, radiolabeled 446311-49-5D, radiolabeled  
 446311-50-8D, radiolabeled 446311-52-0D, radiolabeled  
 446311-53-1D, radiolabeled  
 RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study);  
 USES (Uses)  
 (backbone cyclized radiolabeled **somatostatin** analogs as potential imaging and therapeutic agents)

L25 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 2002:332670 HCAPLUS  
 DOCUMENT NUMBER: 136:341003  
 TITLE: Preparation of conformationally constrained backbone cyclized **somatostatin** analogs  
 INVENTOR(S): Hornik, Vered; Afargan, Michel M.; Gellerman, Gary  
 PATENT ASSIGNEE(S): Israel  
 SOURCE: U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of Appl. No. PCT/IL99/00329.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 10  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002052315	A1	20020502	US 2000-734583	20001213
US 6051554	A	20000418	US 1998-100360	19980619
US 6355613	B1	20020312	US 1998-203389	19981202
WO 9965508	A1	19991223	WO 1999-IL329	19990615

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,

JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,  
 MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,  
 TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,  
 MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,  
 ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
 CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

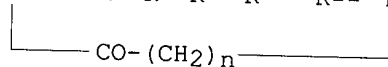
PRIORITY APPLN. INFO.:

US 1998-100360 A2 19980619  
 US 1998-203389 A2 19981202  
 WO 1999-IL329 A2 19990615  
 US 1995-488159 A2 19950607  
 US 1995-569042 A2 19951207  
 US 1996-690609 A2 19960731

OTHER SOURCE(S):  
 GI

MARPAT 136:341003

Q-R<sup>5</sup>-R<sup>6</sup>-R<sup>7</sup>-R<sup>8</sup>-R<sup>9</sup>-R<sup>10</sup>-R<sup>11</sup>-NR<sup>12</sup>-X



I

AB Novel peptides, e.g., I [n = 1-5; X designates a terminal carboxy acid, amide or alc. group; Q is H or a mono- or disaccharide; R<sup>5</sup> is .gamma.-aminobutyric acid, diaminobutyric acid, Gly, .beta.-Ala, 5-aminopentanoic acid, or aminohexanoic acid; R<sup>6</sup> is D- or L-Phe or Tyr; R<sup>7</sup> is D- or L-Trp, -Phe, -1-Nal (1-naphthalenealanine) or -2-Nal, or Tyr; R<sup>8</sup> is D- or L-Trp; R<sup>9</sup> is D- or L-Lys; R<sup>10</sup> is Thr, Gly, Abu (2-aminobutanoic acid), Cys, Val, D- or L-Ala or -Phe; R<sup>11</sup> is D- or L-Phe, -Ala, Nle, or Cys; R<sup>12</sup> is Gly, Val, Leu, D- or L-Phe or lNal or 2Nal], are disclosed which are conformationally constrained backbone cyclized **somatostatin** analogs having **somatostatin** receptor sub-type selectivity. Thus, Phe(C3)-Cys\*-Phe-D-Trp-Lys-Thr-Cys\*-Phe-Phe(N3)-OH (PTR 3205), where one bridge connects the two building units (Phe-C3 and Phe N3, which are phenylalanine modified with carboxy or amine and a three carbon methylene spacer) and the second is a disulfide bridge formed between the two Cys residues, was prepd. by the solid-phase method and showed IC<sub>50</sub> = 10<sup>-6</sup> nM for inhibition of SRIF binding to transmembranal **somatostatin** receptors SST-R1, SST-R3 and SST-R5.

IT 255850-87-4

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (prepn. of conformationally constrained backbone cyclized **somatostatin** analogs)

IT 38916-34-6DP, **Somatostatin**, cyclic analogs  
 252845-37-7P, PTR 3173 252845-42-4P, PTR 3197  
 252845-43-5P, PTR 3207 252845-44-6P, PTR 3211  
 252845-45-7P, PTR 3213 252845-46-8P, PTR 3217  
 252845-47-9P, PTR 3219 252845-48-0P, PTR 3221

RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of conformationally constrained backbone cyclized **somatostatin** analogs)

L25 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:203445 HCAPLUS

DOCUMENT NUMBER: 136:386388

TITLE: Synthesis of novel protected N.alpha.(.omega.-thioalkyl) amino acid building units and their incorporation in backbone cyclic disulfide and thioetheric bridged peptides



AUTHOR(S): Gazal, S.; Gellerman, G.; Glukhov, E.; Gilon, C.  
 CORPORATE SOURCE: Department of Organic Chemistry, Hebrew University, Jerusalem, Israel  
 SOURCE: Journal of Peptide Research (2001), 58(6), 527-539  
 CODEN: JPERFA; ISSN: 1397-002X  
 PUBLISHER: Munksgaard International Publishers Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB General methods for the prepn. of protected N.alpha.(.omega.-thioalkyl) amino acids building units for backbone cyclization using reductive alkylation and on-resin prepn. are described. The synthesis of non-Gly Fmoc-protected S-functionalized N-alkylated amino acids is based on the reaction of readily prepd. protected .omega.-thio aldehyde with the appropriate amino acid. Prepn. of Fmoc-protected S-functionalized N-alkylated Gly building units was carried out using two methods: reaction of glyoxylic acid with AcM-thioalkylamine and an on-resin reaction of bromoacetyl resin with Trt-thioalkylamines. Three model peptides were prepd. using these building units. The GlyS2 building unit was incorporated into a backbone cyclic analog of **somatostatin** that contains a disulfide bridge. Formation of the disulfide bridge was performed by on-resin oxidn. using I2 or TI(CF3COO-)<sub>3</sub>. Both methods resulted in the desired product in a high degree of purity in the crude. The AspS3 building unit was also successfully incorporated into a model peptide. In addn., the in situ generation of sulfur contg. Gly building units was demonstrated on a Substance P backbone cyclic analog contg. a thioether bridge.

IT 252845-42-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (synthesis of protected thioalkyl amino acids for incorporation in backbone cyclic disulfide and thioetheric bridged peptides using reductive alkylation and on-resin oxidn.)

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:197431 HCAPLUS

DOCUMENT NUMBER: 136:386384

TITLE: Human **Somatostatin** Receptor Specificity of Backbone-Cyclic Analogues Containing Novel Sulfur Building Units

AUTHOR(S): Gazal, Sharon; Gellerman, Garry; Ziv, Ofer; Karpov, Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michel; Gilon, Chaim

CORPORATE SOURCE: Department of Organic Chemistry, Hebrew University, Jerusalem, 91904, Israel

SOURCE: Journal of Medicinal Chemistry (2002), 45(8), 1665-1671

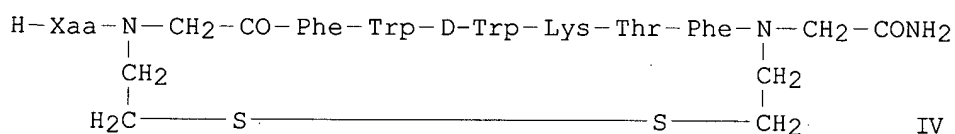
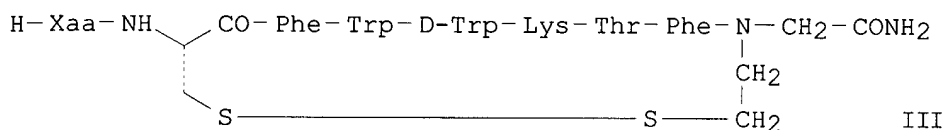
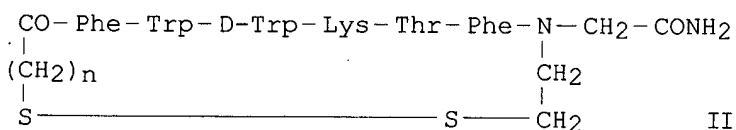
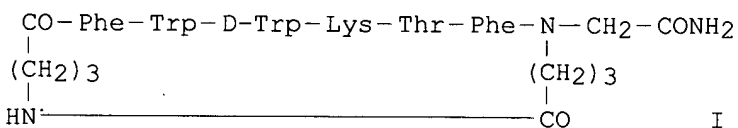
CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB **Somatostatin-14 (somatostatin)** and its clin. available analogs (octreotide, lanreotide and vapreotide) are potent inhibitors of growth hormone, insulin, and glucagon release. Recently, the synthesis of PTR-3173 (I), a novel cyclic **somatostatin** analog with in vivo endocrine selectivity, was described. I exhibited high affinity to human recombinant **somatostatin** receptors (hsst) hsst2, hsst4 and hsst5. Its novel binding profile included potent in vivo inhibition of growth hormone but not of insulin release. Here, the synthesis, bioactivity, and structure-activity relationship studies of peptides II (n = 1, 2), III (Xaa = nil, D-Phe) and IV (Xaa = nil, D-Phe, D-Nal) are reported and compared to those of I. In II-IV, the lactam bridge of I was replaced by a backbone disulfide bridge. II-IV showed significant metabolic stability as tested in various enzyme mixts. The receptor binding assays for II-IV revealed that their selectivity had increased towards hsst2 and hsst5, but decreased towards hsst4 in comparison to I. In addn., this work also described the synthesis of sulfur-contg. building units, such as Ac<sub>m</sub>-S-CH<sub>2</sub>CH<sub>2</sub>N(Fmoc)CH<sub>2</sub>CO<sub>2</sub>H (Ac<sub>m</sub> = acetamidomethyl), for incorporation into peptides as groups capable of forming disulfide bridges.

IT **252845-37-7**, PTR 3173

RL: BSU (Biological study, unclassified); BIOL (Biological study) (prepn. and receptor-binding activity of disulfide-bridged **somatostatin** analogs)

IT **51110-01-1DP, Somatostatin-14**, disulfide-bridged analogs

**252845-42-4P 252845-43-5P 252845-44-6P**

**252845-45-7P 252845-46-8P 252845-47-9P**

**425428-86-0P**

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);

BIOL (Biological study); PREP (Preparation)

(prepn. and receptor-binding activity of disulfide-bridged **somatostatin** analogs)

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:182173 HCAPLUS

DOCUMENT NUMBER: 136:227293

TITLE: Selectivity of conformationally constrained backbone cyclized **somatostatin** analogs with respect to insulin, GH, and glucagon secretion and **somatostatin** receptor binding

INVENTOR(S): Hornik, Vered; Gellerman, Gary; Afargan, Mich El M.

PATENT ASSIGNEE(S): Peptor Limited, Israel

SOURCE: U.S., 21 pp., Cont.-in-part of U.S. 6,051,554.  
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 10

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6355613	B1	20020312	US 1998-203389	19981202
US 6051554	A	20000418	US 1998-100360	19980619
CA 2335488	AA	19991223	CA 1999-2335488	19990615
WO 9965508	A1	19991223	WO 1999-IL329	19990615
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9942884	A1	20000105	AU 1999-42884	19990615
AU 747515	B2	20020516		
EP 1085896	A1	20010328	EP 1999-957020	19990615
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002518339	T2	20020625	JP 2000-554387	19990615
US 2002052315	A1	20020502	US 2000-734583	20001213
PRIORITY APPLN. INFO.:				
			US 1996-690609	A2 19960731
			US 1998-100360	A2 19980619
			US 1995-488159	A2 19950607
			US 1995-569042	A2 19951207
			US 1998-203389	A 19981202
			WO 1999-IL329	W 19990615

OTHER SOURCE(S): MARPAT 136:227293

AB Novel peptides which are conformationally constrained backbone cyclized **somatostatin** analogs. Methods for synthesizing the **somatostatin** analogs and for producing libraries of the **somatostatin** analogs are also disclosed. Furthermore, pharmaceutical compns. comprising **somatostatin** analogs, and methods of using such compns. are disclosed.

IT **40958-31-4DP, Somatostatin** (sheep reduced), cyclic analogs  
RL: BSU (Biological study, unclassified); CPN (Combinatorial preparation); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); USES (Uses)  
(prepn. of conformationally constrained backbone cyclized **somatostatin** analogs for therapeutic use)

IT **9002-72-6, Growth hormone**  
RL: BSU (Biological study, unclassified); BIOL (Biological study) (selectivity of conformationally constrained backbone cyclized **somatostatin** analogs with respect to insulin, GH, and glucagon secretion and **somatostatin** receptor binding)

IT **252845-37-7P 252845-42-4P**  
RL: BSU (Biological study, unclassified); CPN (Combinatorial preparation); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial

study); PREP (Preparation); USES (Uses)  
(selectivity of conformationally constrained backbone cyclized  
**somatostatin** analogs with respect to insulin, GH, and glucagon  
secretion and **somatostatin** receptor binding)

REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:783790 HCAPLUS

DOCUMENT NUMBER: 136:151429

TITLE: A bioactive **somatostatin** analog without a  
type II' .beta.-turn: synthesis and conformational  
analysis in solution

AUTHOR(S): Jiang, Shaokai; Gazal, Sharon; Gelerman, Gary; Ziv,  
Ofer; Karpov, Olga; Litman, Pninit; Bracha, Moshe;  
Afargan, Michael; Gilon, Chaim; Goodman, Murray

CORPORATE SOURCE: Department of Chemistry and Biochemistry, University  
of California, San Diego, La Jolla, CA, USA

SOURCE: Journal of Peptide Science (2001), 7(10), 521-528, 2  
plates

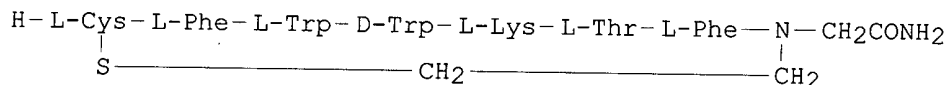
CODEN: JPSIEI; ISSN: 1075-2617

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



I

AB A cyclic **somatostatin** analog I has been synthesized. Biol.  
assays show that this compd. has strong binding affinities to  
**somatostatin** hsst2 and hsst5 receptor subtypes (5.2 and 1.2 nM,  
resp., and modest affinity to hsst4 (41.1 nM)). Our conformational anal.  
carried out in DMSO-d6 indicates that this compd. exists as two structures  
arising from the trans and cis configurations of the peptide bond between  
Phe7 and N-alkylated Gly8. However, neither conformer exhibits a type II'  
.beta.-turn. This is the first report of a potent bioactive  
**somatostatin** analog that does not exhibit a type II' .beta.-turn  
in soln. Mol. dynamics simulations (500 ps) carried out at 300 K indicate  
that the backbone of compd. I is more flexible than other cyclic  
**somatostatin** analogs formed by disulfide bonds.

IT 51110-01-1DP, **Somatostatin**, analogs 252845-42-4P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(solid phase peptide synthesis and conformation by NMR of bioactive  
**somatostatin** analog without type II .beta.-turn)

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:607431 HCAPLUS

DOCUMENT NUMBER: 135:313821

TITLE: A novel **somatostatin** analogue prevents early  
renal complications in the nonobese diabetic mouse

AUTHOR(S): Landau, Daniel; Segev, Yael; Afargan, Michel;  
Silbergeld, Aviva; Katchko, Leonid; Podshyvalov,  
Andrey; Phillip, Moshe

CORPORATE SOURCE: Department of Pediatrics and Pathology, Laboratory of  
Molecular Endocrinology, University of the Negev, Beer

SOURCE: Sheva, Israel  
Kidney International (2001), 60(2), 505-512  
CODEN: KDYIA5; ISSN: 0085-2538  
PUBLISHER: Blackwell Science, Inc.  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB PTR-3173 (S) is a novel **somatostatin** analog that has been found to exert a prolonged inhibitory action on the growth hormone (GH)-insulin-like growth factor (IGF)-I axis, but not on insulin secretion. The authors investigated the potential effect of this agent on the development of markers of diabetic nephropathy in the nonobese diabetic (NOD) mouse model of insulin-dependent diabetes. Female diabetic NOD mice treated with PTR-3173 (DS group) or saline (D) and their control groups of nonhyperglycemic age-matched littermates (C) and C mice treated with PTR-3173 (CS) were sacrificed 3 wk after onset of diabetes. Serum GH was elevated in the D group, decreased in the DS group, and unchanged in the CS group. Serum IGF-I was significantly decreased in both the D and DS groups. Kidney wt., glomerular vol., albuminuria, and creatinine clearance were increased in the D animals and showed a trend toward normalization in the DS animals. Renal extractable IGF-I protein and IGFBP1 mRNA were increased in the D group and normalized in the DS group. GH antagonism by PTR-3173 has a blunting effect on renal/glomerular hypertrophy, albuminuria, and glomerular filtration rate (GFR) in diabetic NOD mice. This phenomenon is apparently assocd. with the prevention of renal IGF-I accumulation. Thus, modulation of GH effects may have beneficial therapeutic implications in diabetic nephropathy.

IT 252845-37-7, PTR 3173

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(**somatostatin** analog PTR 3173 prevents early renal complications in nonobese diabetic mouse)

IT 9002-72-6, Growth hormone 67763-96-6, IGF-I

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(**somatostatin** analog PTR 3173 prevents early renal complications in nonobese diabetic mouse)

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:51142 HCAPLUS

DOCUMENT NUMBER: 134:95704

TITLE: Novel long-acting **somatostatin** analog with endocrine selectivity: potent suppression of growth hormone but not of insulin

AUTHOR(S): Afargan, Michel; Janson, Eva Tiensuu; Gelerman, Garry; Rosenfeld, Rakefet; Ziv, Offer; Karpov, Olga; Wolf, Amnon; Bracha, Moshe; Shohat, Dvira; Liapakis, George; Gilon, Chaim; Hoffman, Amnon; Stephensky, David; Oberg, Kjell

CORPORATE SOURCE: Peptor Ltd., Kiryat Weizmann, Rehovot, 76326, Israel

SOURCE: Endocrinology (2001), 142(1), 477-486

CODEN: ENDOAO; ISSN: 0013-7227

PUBLISHER: Endocrine Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB **Somatostatin**, also known as **somatotropin** release-inhibiting factor (SRIF), is a natural cyclic peptide inhibitor of pituitary, pancreatic, and gastrointestinal secretion. Its long-acting analogs are in clin. use for treatment of various endocrine syndromes and gastrointestinal anomalies. These analogs are more potent inhibitors of the endocrine release of GH, glucagon, and insulin than the native SRIF;

hence, they do not display considerable physiol. selectivity. Our goal was to design effective and physiol. selective SRIF analogs with potential therapeutic value. We employed an integrated approach consisting of screening of backbone cyclic peptide libraries constructed on the basis of mol. modeling of known SRIF agonists and of high throughput receptor binding assays with each of the five cloned human SRIF receptors (hsst1-5). By using this approach, we identified a novel, high affinity, enzymically stable, and long-acting SRIF analog, PTR-3173, which binds with nanomolar affinity to human SRIF receptors hsst2, hsst4, and hsst5. The hsst5 and the rat sst5 (rsst5) forms have the same nanomolar affinity for this analog. In the human carcinoid-derived cell line BON-1, PTR-3173 inhibits forskolin-stimulated cAMP accumulation as efficiently as the drug octreotide, indicating its agonistic effect in this human cell system. In hormone secretion studies with rats, we found that PTR-3173 is 1000-fold and more than 10,000-fold more potent in inhibiting GH release than glucagon and insulin release, resp. These results suggest that PTR-3173 is the first highly selective **somatostatinergic** analog for the in vivo inhibition of GH secretion, with minimal or no effect on glucagon and insulin release, resp.

IT 252845-37-7, PTR 3173

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(long-acting **somatostatin** analog with endocrine selectivity for potent suppression of growth hormone but not of insulin secretion)

IT 9002-72-6, Growth hormone

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(long-acting **somatostatin** analog with endocrine selectivity for potent suppression of growth hormone but not of insulin secretion)

IT 51110-01-1, **Somatostatin**-14

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(long-acting **somatostatin** analog with endocrine selectivity for potent suppression of growth hormone but not of insulin secretion and receptor binding selectivity)

REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:811096 HCAPLUS

DOCUMENT NUMBER: 132:50250

TITLE: Preparation of conformationally constrained backbone cyclized **somatostatin** analogs

INVENTOR(S): Hornik, Vered; Afargan, Michel M.; Gellerman, Gary

PATENT ASSIGNEE(S): Peptor Ltd., Israel

SOURCE: PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 10

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9965508	A1	19991223	WO 1999-IL329	19990615
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,			

CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6051554	A	20000418	US 1998-100360	19980619
US 6355613	B1	20020312	US 1998-203389	19981202
CA 2335488	AA	19991223	CA 1999-2335488	19990615
AU 9942884	A1	20000105	AU 1999-42884	19990615
AU 747515	B2	20020516		
EP 1085896	A1	20010328	EP 1999-957020	19990615

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

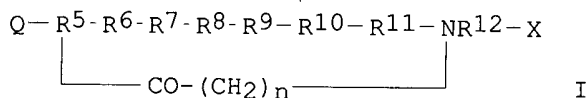
JP 2002518339	T2	20020625	JP 2000-554387	19990615
US 2002052315	A1	20020502	US 2000-734583	20001213

PRIORITY APPLN. INFO.:

US 1998-100360	A	19980619
US 1998-203389	A	19981202
US 1995-488159	A2	19950607
US 1995-569042	A2	19951207
US 1996-690609	A2	19960731
WO 1999-IL329	W	19990615

OTHER SOURCE(S): MARPAT 132:50250

GI



AB Novel peptides, e.g., I [n = 1-5; X designates a terminal carboxy acid, amide or alc. group; Q is H or a mono- or disaccharide; R<sup>5</sup> is .gamma.-aminobutyric acid, diaminobutyric acid, Gly, .beta.-Ala, 5-aminopentanoic acid, or aminohexanoic acid; R<sup>6</sup> is D- or L-Phe or Tyr; R<sup>7</sup> is D- or L-Trp, -Phe, -1-Nal (1-naphthalenealanine) or -2-Nal, or Tyr; R<sup>8</sup> is D- or L-Trp; R<sup>9</sup> is D- or L-Lys; R<sup>10</sup> is Thr, Gly, Abu (2-aminobutanoic acid), Cys, Val, D- or L-Ala or -Phe; R<sup>11</sup> is D- or L-Phe, -Ala, Nle, or Cys; R<sup>12</sup> is Gly, Val, Leu, D- or L-Phe or 1Nal or 2Nal], are disclosed which are conformationally constrained backbone cyclized **somatostatin** analogs having **somatostatin** receptor sub-type selectivity. Thus, Phe(C3)-Cys\*-Phe-D-Trp-Lys-Thr-Cys\*-Phe-Phe(N3)-OH (PTR 3205), where one bridge connects the two building units (Phe-C3 and Phe N3, which are phenylalanine modified with carboxy or amine and a three carbon methylene spacer) and the second is a disulfide bridge formed between the two Cys residues, was prepd. by the solid-phase method and showed IC<sub>50</sub> = 10<sup>-6</sup> nM for inhibition of SRIF binding to transmembranal **somatostatin** receptors SST-R1, SST-R3 and SST-R5.

IT 38916-34-6DP, **Somatostatin**, cyclic analogs

252845-37-7P, PTR 3173 252845-42-4P, PTR 3197

252845-43-5P, PTR 3207 252845-44-6P, PTR 3211

252845-45-7P, PTR 3213 252845-46-8P, PTR 3217

252845-47-9P, PTR 3219 252845-48-0P, PTR 3221

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of conformationally constrained backbone cyclized

**somatostatin** analogs)

REFERENCE COUNT:

5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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E1 THROUGH E47 ASSIGNED

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FILE 'REGISTRY' ENTERED AT 11:11:45 ON 22 JUL 2003  
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STRUCTURE FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7  
 DICTIONARY FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when  
 conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP  
 PROPERTIES for more information. See STNote 27, Searching Properties  
 in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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=>

=> d sqide can 126 1-42

L26 ANSWER 1 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 446862-80-2 REGISTRY  
 CN Rhenium, [glycyl-.kappa.N-2-[[ (mercapto-.kappa.S)acetyl]amino-.kappa.N]-  
 .beta.-alanyl-.kappa.N-.beta.-alanyl-(2S)-2,4-diaminobutanoyl-L-  
 phenylalanyl-D-tryptophyl-L-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-  
 N2-(3-carboxypropyl)glycinamide (11.fwdarw.4)-lactamato(3-)]oxo-,  
 (SP-5-24)- (9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE  
 SQL 10  
 NTE metal complex  
 modified (modifications unspecified)

type	location	description
uncommon	Bal-2	-
uncommon	Dab-3	-
stereo	Trp-5	D

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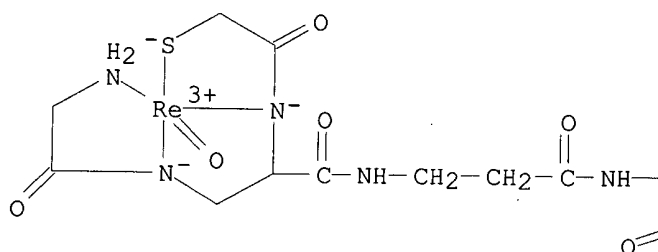
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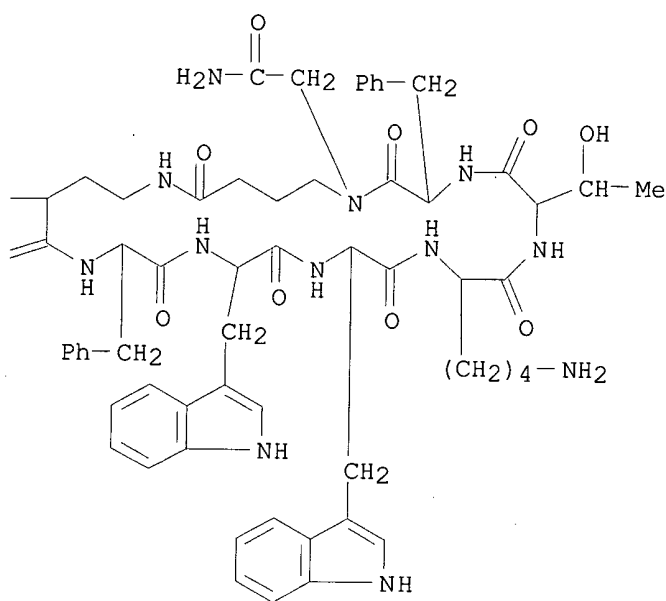
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 CI CCS  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER



PAGE 1-A



PAGE 1-B



1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 2 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN 446862-79-9 REGISTRY

CN Rhenate(1-), [N-[(mercapto-.kappa.S)acetyl]-3-[[mercapto-.kappa.S)acetyl]amino-.kappa.N-.beta.-alanyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-D-tryptophyl-L-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (10.fwdarw.3)-lactamato(4-)]oxo-, hydrogen, (SP-5-35)- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE

SQL 10

NTE metal complex

modified (modifications unspecified)

type	location	description
uncommon	Bal-2	-

uncommon	Dab-3	-	-
stereo	Trp-5	-	D

SEQ 1 AXXFWWKTFG

HITS AT: 4-10

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

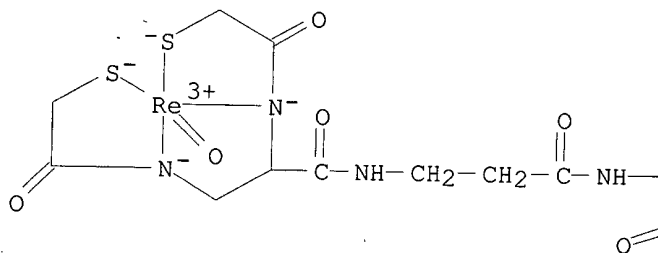
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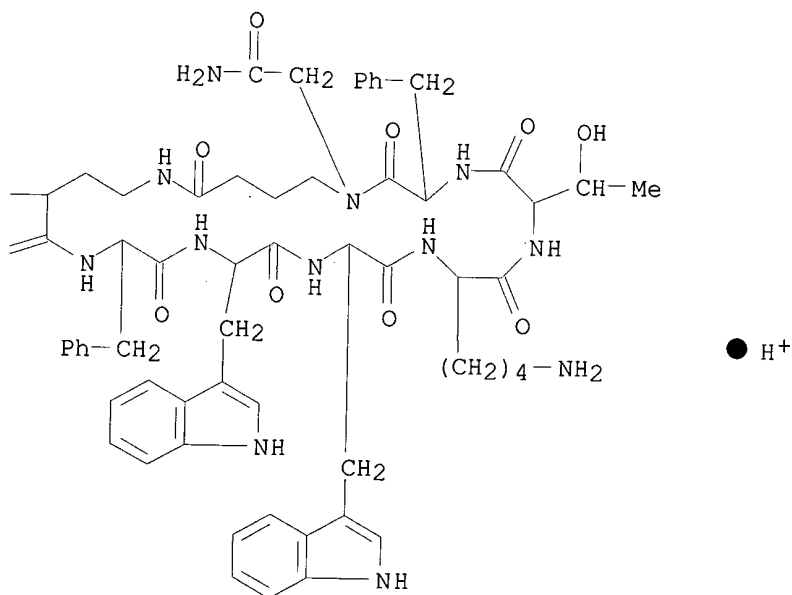
SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

PAGE 1-A



PAGE 1-B



1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 3 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 446311-76-8 REGISTRY

CN Rhenium, [glycyl-.kappa.N-3-[[ (mercapto-.kappa.S)acetyl]amino-.kappa.N]alanyl-.kappa.N-.beta.-alanyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-D-tryptophyl-L-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (11.fwdarw.4)-lactamato(3-)]oxo-, (SP-5-23)- (9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE  
 SQL 11  
 NTE metal complex  
 modified (modifications unspecified)

type	-----	location	-----	description
bridge	Dab-4	-	Gly-11	covalent bridge
uncommon	Bal-3	-	-	-
uncommon	Dab-4	-	-	-
stereo	Trp-6	-	-	D

SEQ 1 GAXXFWWKTF G  
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HITS AT: 5-11

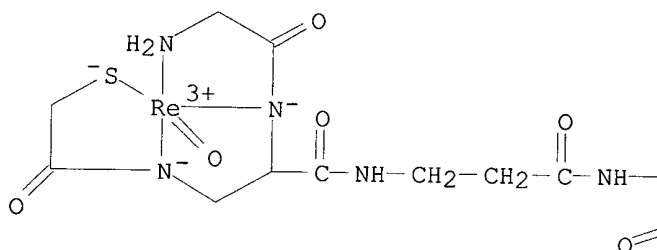
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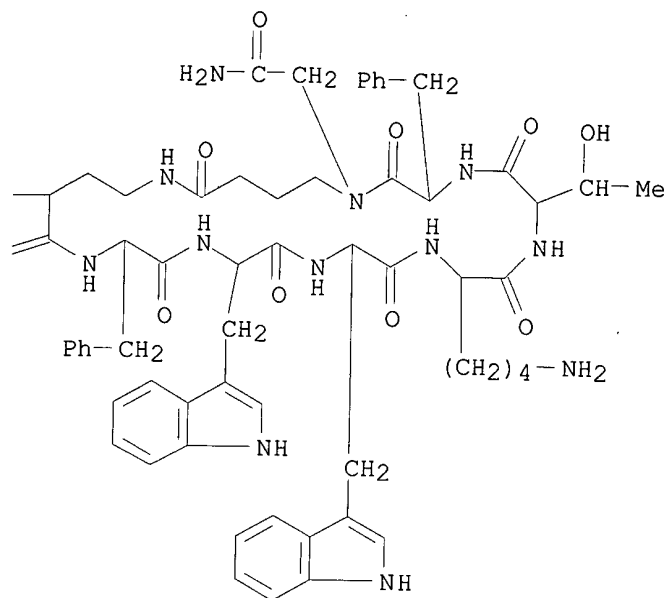
CI CCS

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

PAGE 1-A





1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 4 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN 446311-75-7 REGISTRY

CN Rhenate(1-), [N-[(mercapto-.kappa.S)acetyl]glycyl-.kappa.N-glycyl-.kappa.N-glycyl-.kappa.N-6-aminohexanoyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (12.fwdarw.5)-lactamato(4-)]oxo-, hydrogen, (SP-5-24)-(9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE

SQL 12

NTE metal complex

modified (modifications unspecified)

type	-----	location	-----	description
bridge	Dab-5	-	Gly-12	covalent bridge
uncommon	Oaa-4	-	-	-
uncommon	Dab-5	-	-	-
stereo	Trp-8	-	-	D

SEQ 1 GGGXXFWWKT FG

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HITS AT: 6-12

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

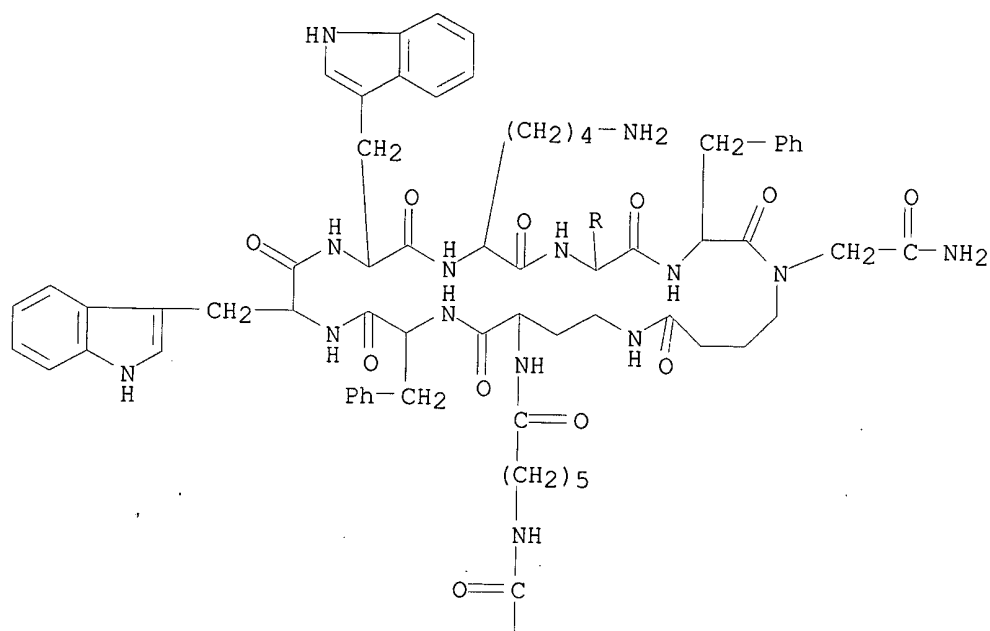
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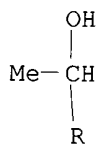
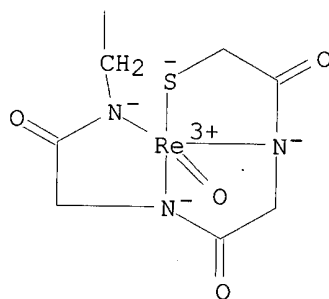
SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

PAGE 1-A



PAGE 2-A



PAGE 3-A

● H<sup>+</sup>

1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 5 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN **446311-74-6** REGISTRY  
 CN Rhenate(1-), [N-[(mercapto-.kappa.S)acetyl]glycyl-.kappa.N-glycyl-.kappa.N-glycyl-.kappa.N-5-aminopentanoyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (12.fwdarw.5)-lactamato(4-)]oxo-, hydrogen, (SP-5-24)-(9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE  
 SQL 12  
 NTE metal complex  
 modified (modifications unspecified)

type	-----	location	-----	description
bridge	Dab-5	- Gly-12		covalent bridge
uncommon	Oaa-4	-	-	-
uncommon	Dab-5	-	-	-
stereo	Trp-8	-		D

SEQ 1 GGGXXFWWKT FG

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HITS AT: 6-12

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

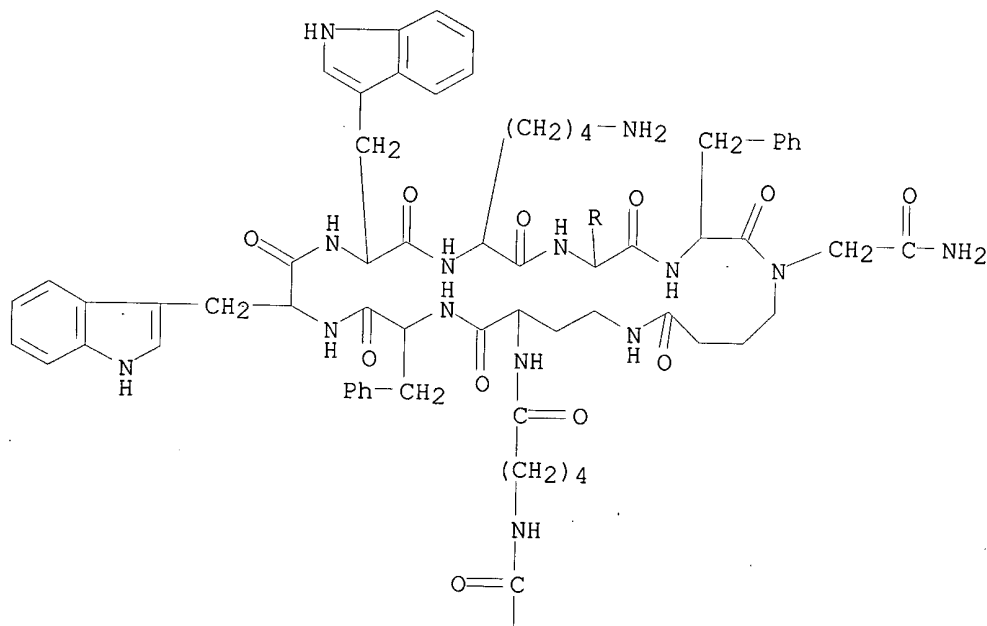
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CI CCS

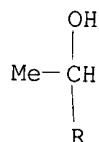
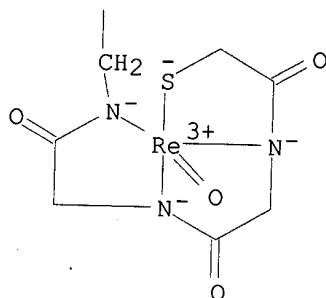
SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

PAGE 1-A



PAGE 2-A



PAGE 3-A

● H<sup>+</sup>

1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 6 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN **446311-73-5** REGISTRY

CN Rhenate(1-), [N-[(mercapto-.kappa.S)acetyl]glycyl-.kappa.N-glycyl-.kappa.N-glycyl-.kappa.N-4-aminobutanoyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (12.fwdarw.5)-lactamato(4-)]oxo-, hydrogen, (SP-5-24)- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE

SQL 12

NTE metal complex

modified (modifications unspecified)

type	-----	location	-----	description
bridge	Dab-5	-	Gly-12	covalent bridge
uncommon	Oaa-4	-	-	-
uncommon	Dab-5	-	-	-
stereo	Trp-8	-	-	D

SEQ 1 GGGXXFWWKT FG

=====

HITS AT: 6-12

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

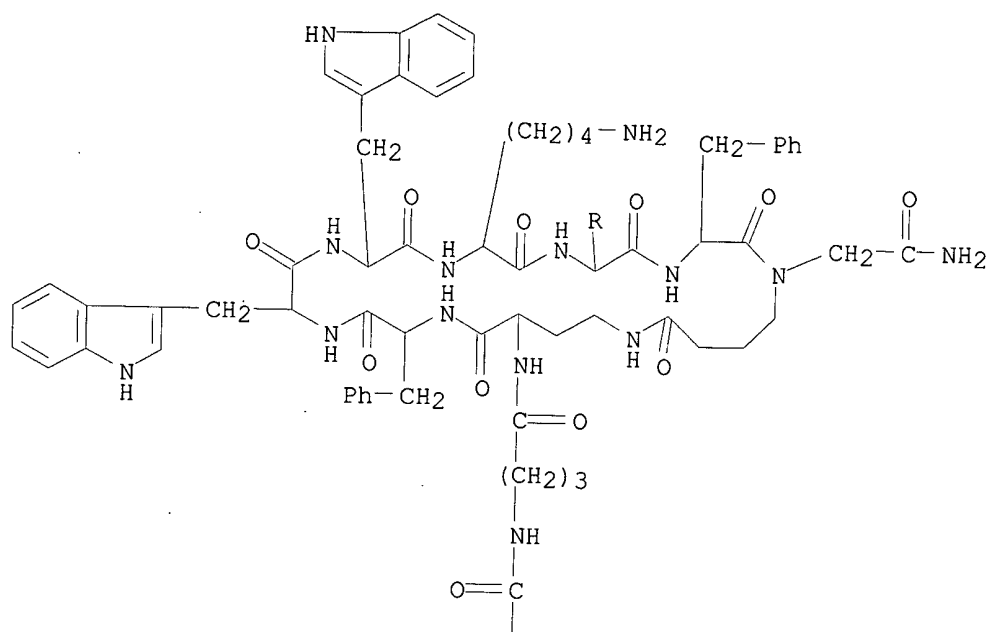
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CI CCS

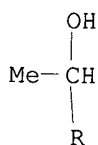
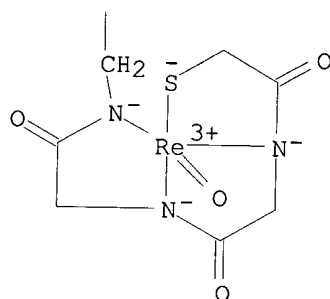
SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

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● H<sup>+</sup>

- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

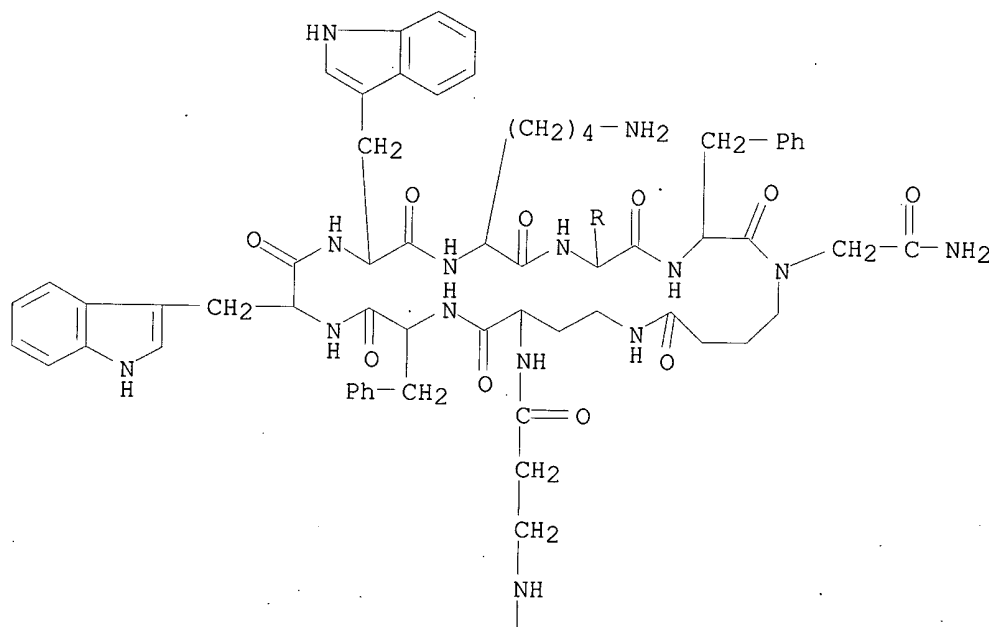
REFERENCE 1: 137:165559



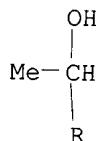
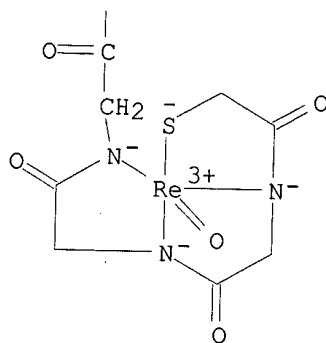
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SEQ          1 GGGXXFWWKT FG
              =====
HITS AT:      6-12
MF C71 H87 N17 O16 Re S . H
CI CCS
SR CA
LC STN Files:  CA, CAPLUS, TOXCENTER

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● H<sup>+</sup>

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REFERENCE 1: 137:165559

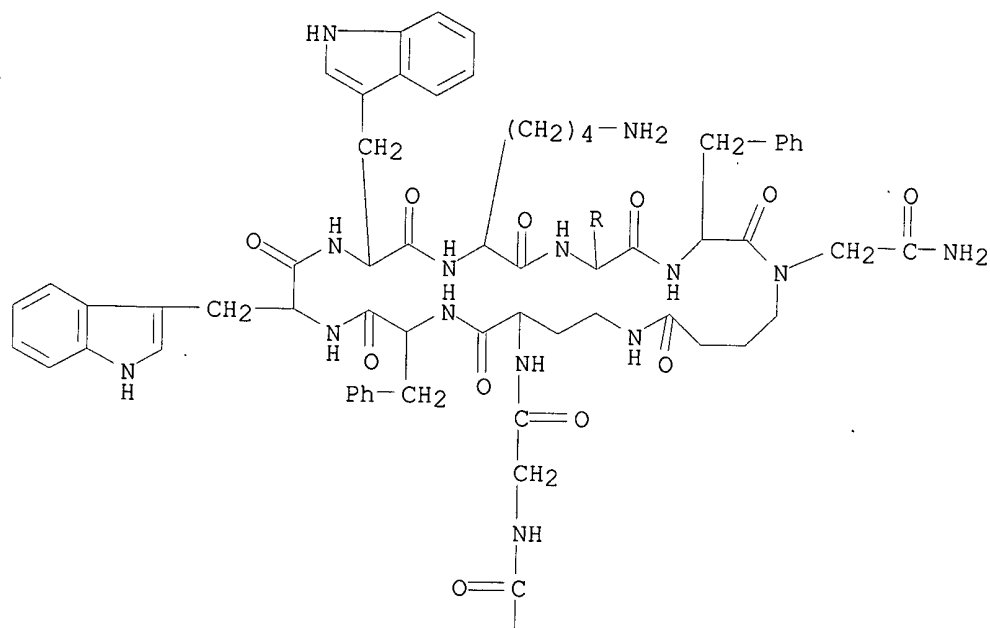
L26 ANSWER 8 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN  
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 FS PROTEIN SEQUENCE  
 SQL 12  
 NTE metal complex  
 modified (modifications unspecified)

type	-----	location	-----	description
bridge	Dab-5	-	Gly-12	covalent bridge
uncommon	Dab-5	-	-	-
stereo	Trp-8	-	-	D

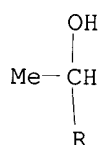
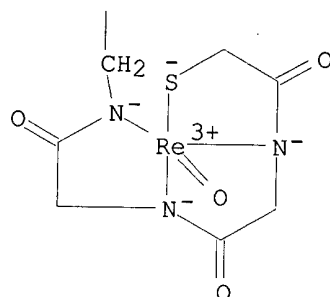
SEQ 1 GGGGXFWWKT FG  
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HITS AT: 6-12  
 MF C70 H85 N17 O16 Re S . H  
 CI CCS  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER

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● H<sup>+</sup>

1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 9 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

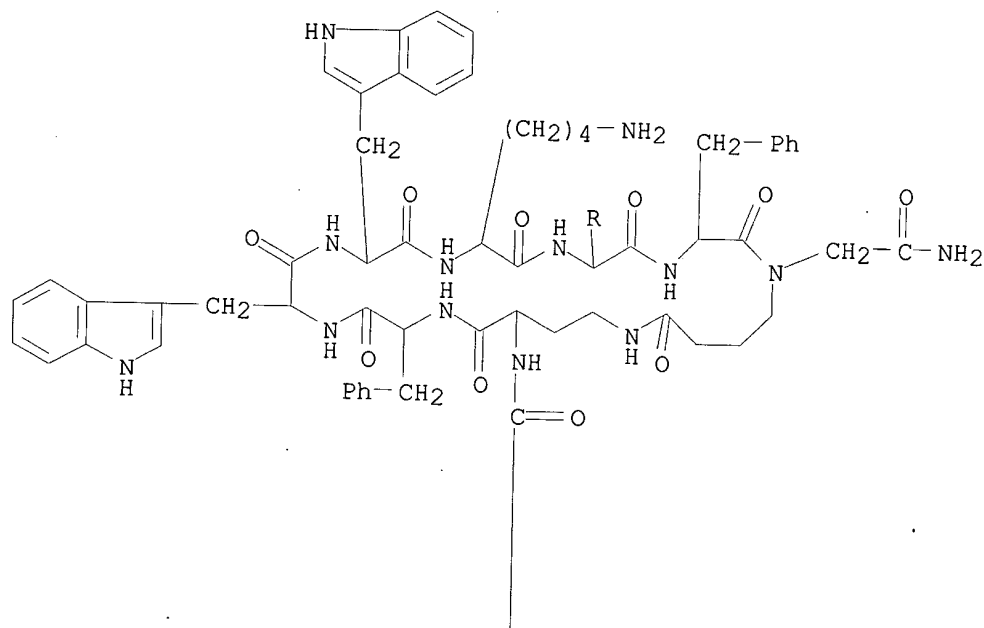
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 FS PROTEIN SEQUENCE  
 SQL 11  
 NTE metal complex  
 modified (modifications unspecified)

type	-----	location	-----	description
bridge	Dab-4	-	Gly-11	covalent bridge
uncommon	Dab-4	-	-	-
stereo	Trp-7	-	-	D

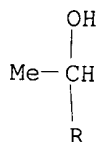
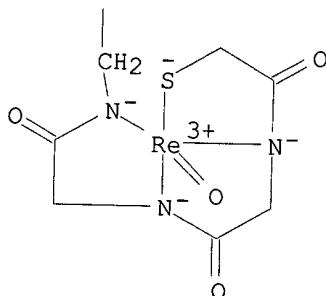
SEQ 1 GGGXFWWKTF G  
 =====

HITS AT: 5-11  
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 CI CCS  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER

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● H<sup>+</sup>

1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 10 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN **446311-69-9** REGISTRY  
 CN Rhenate(1-), [N-[(mercapto-.kappa.S)acetyl]-3-[[ (mercapto-.kappa.S)acetyl]amino-.kappa.N]alanyl-.kappa.N-6-aminohexanoyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (10.fwdarw.3)-lactamato(4-)]oxo-, hydrogen, (SP-5-35)- (9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE  
 SQL 10  
 NTE metal complex  
 modified (modifications unspecified)

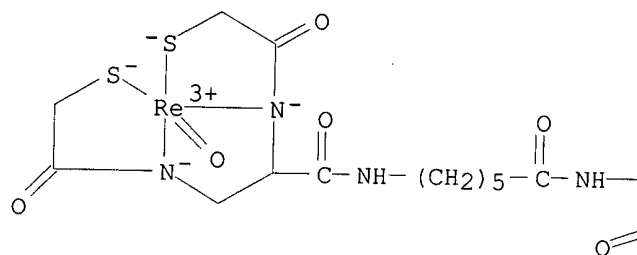
type	-----	location	-----	description
bridge	Dab-3	-	Gly-10	covalent bridge
uncommon	Oaa-2	-	-	-
uncommon	Dab-3	-	-	-
stereo	Trp-6	-	-	D

SEQ 1 AXXFWWKTFG

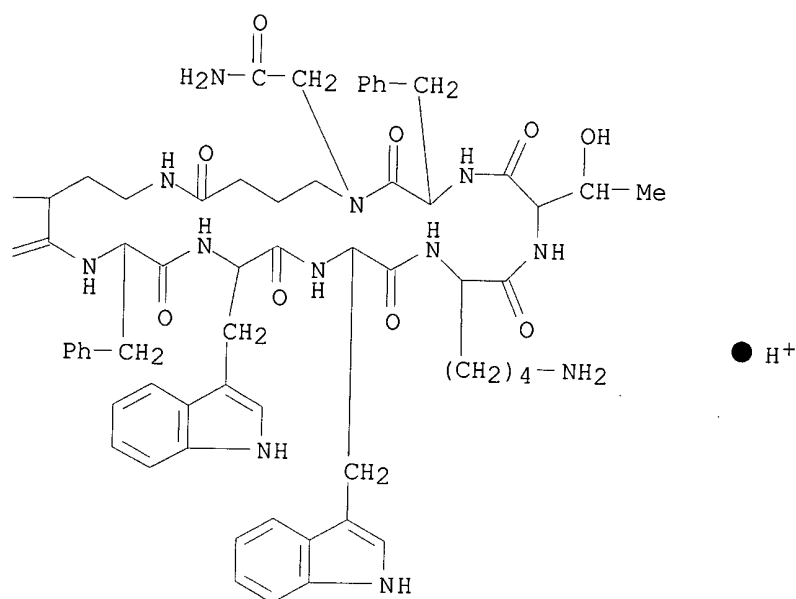
HITS AT: 4-10

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

MF C73 H92 N16 O15 Re S2 . H  
 CI CCS  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER



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1 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

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L26 ANSWER 11 OF 42  REGISTRY  COPYRIGHT 2003 ACS on STN
RN 446311-68-8  REGISTRY
CN Rhenate(1-), [N-[[ (mercapto-.kappa.S)acetyl]-3-[[ (mercapto-
.kappa.S)acetyl]amino-.kappa.N]alanyl-.kappa.N-5-aminopentanoyl-(2S)-2,4-
diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-
threonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide
(10.fwdarw.3)-lactamato(4-)]oxo-, hydrogen, (SP-5-35)- (9CI) (CA INDEX
NAME)
FS PROTEIN SEQUENCE
SQL 10
NTE metal complex
modified (modifications unspecified)

```

type	location	description
------	----------	-------------

bridge	Dab-3	- Gly-10	covalent bridge
uncommon	Oaa-2	-	-
uncommon	Dab-3	-	-
stereo	Trp-6	-	D

SEQ 1 AXXFWWKTFG

HITS AT: 4-10

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

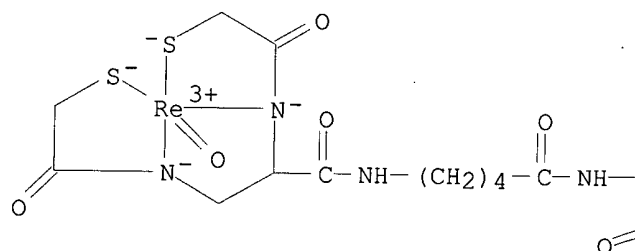
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CI CCS

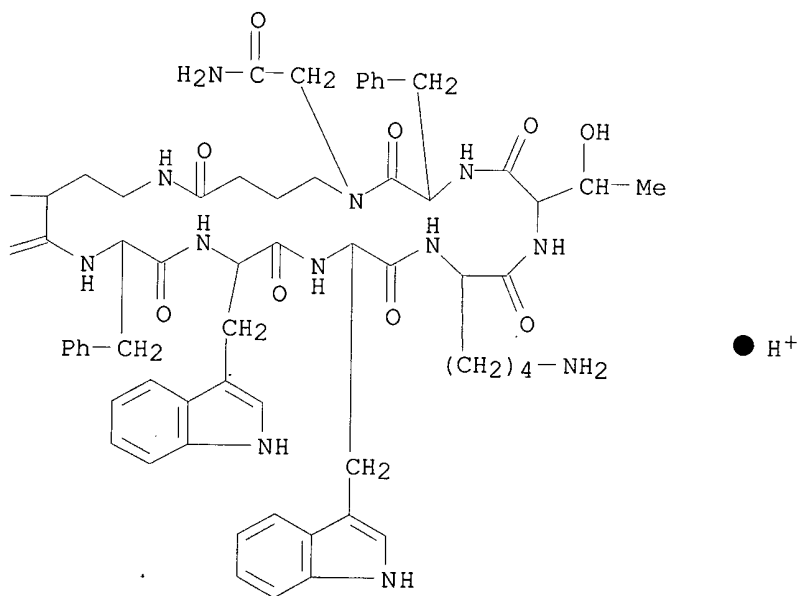
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LC STN Files: CA, CAPLUS, TOXCENTER

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1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 12 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 446311-67-7 REGISTRY  
 CN Rhenium, [glycyl-.kappa.N-2-[[ (mercapto-.kappa.S)acetyl]amino-.kappa.N]-  
 .beta.-alanyl-.kappa.N-4-aminobutanoyl-(2S)-2,4-diaminobutanoyl-L-  
 phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-  
 N2-(3-carboxypropyl)glycinamide (11.fwdarw.4)-lactamato(3-)]oxo-,  
 (SP-5-24)-(9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE  
 SQL 10  
 NTE metal complex  
 modified (modifications unspecified)

type	----- location -----		description
bridge	Dab-3	- Gly-10	covalent bridge
uncommon	Oaa-2	-	-
uncommon	Dab-3	-	-
stereo	Trp-6	-	D

SEQ 1 AXXFWWKTFG

HITS AT: 4-10

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

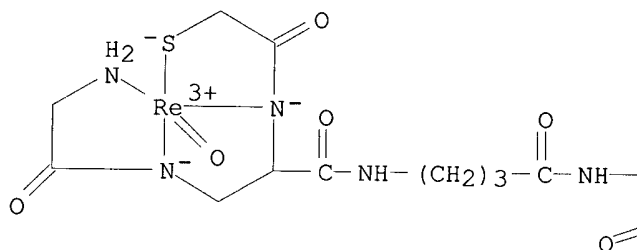
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CI CCS

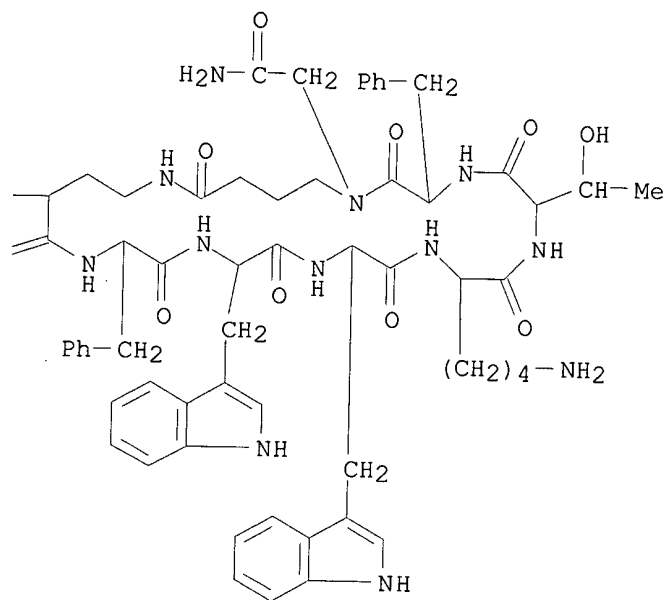
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LC STN Files: CA, CAPLUS, TOXCENTER

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1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 13 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN 446311-66-6 REGISTRY

CN Rhenate(1-), [N-[(mercapto-.kappa.S)acetyl]-3-[[ (mercapto-.kappa.S)acetyl]amino-.kappa.N]alanyl-.kappa.N-4-aminobutanoyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (10.fwdarw.3)-lactamato(4-)]oxo-, hydrogen, (SP-5-35)- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE

SQL 10

NTE metal complex

modified (modifications unspecified)

type	----- location -----		description
bridge	Dab-3	- Gly-10	covalent bridge
uncommon	Oaa-2	-	-
uncommon	Dab-3	-	-
stereo	Trp-6	-	D

SEQ 1 AXXFWWKTFG

=====

HITS AT: 4-10

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

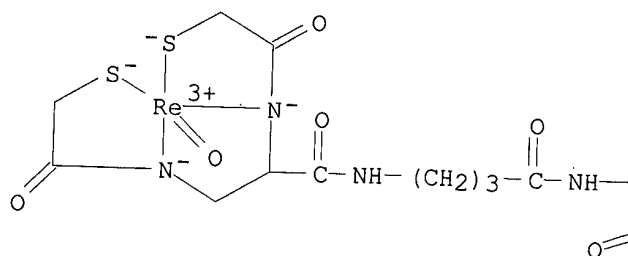
MF C71 H88 N16 O15 Re S2 . H

CI CCS

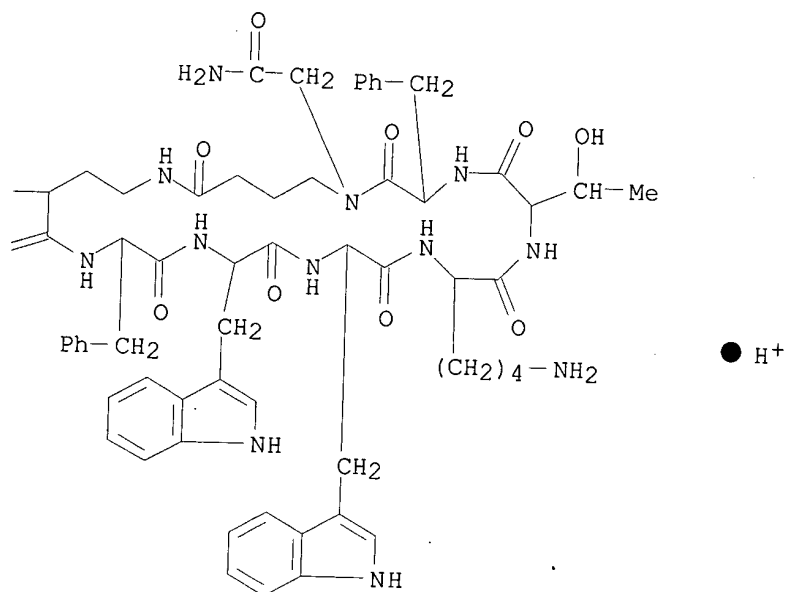
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LC STN Files: CA, CAPLUS, TOXCENTER

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1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 14 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN **446311-65-5** REGISTRY  
 CN Rhenium, [glycyl-.kappa.N-2-[[[mercapto-.kappa.S)acetyl]amino-.kappa.N]-  
 .beta.-alanyl-.kappa.N-.beta.-alanyl-(2S)-2,4-diaminobutanoyl-L-  
 phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-  
 N2-(3-carboxypropyl)glycinamide (11.fwdarw.4)-lactamato(3-)]oxo-,  
 (SP-5-24)-(9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE  
 SQL 10  
 NTE metal complex  
 modified (modifications unspecified)

type	-----	location	-----	description
bridge	Dab-3	-	Gly-10	covalent bridge
uncommon	Bal-2	-	-	-
uncommon	Dab-3	-	-	-

stereo Trp-6 - D

SEQ 1 AXXFWWKTFG

HITS AT: 4-10

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

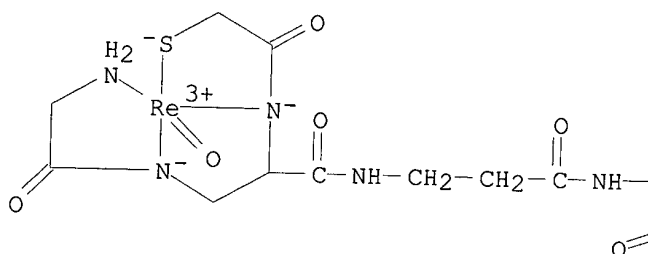
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CI CCS

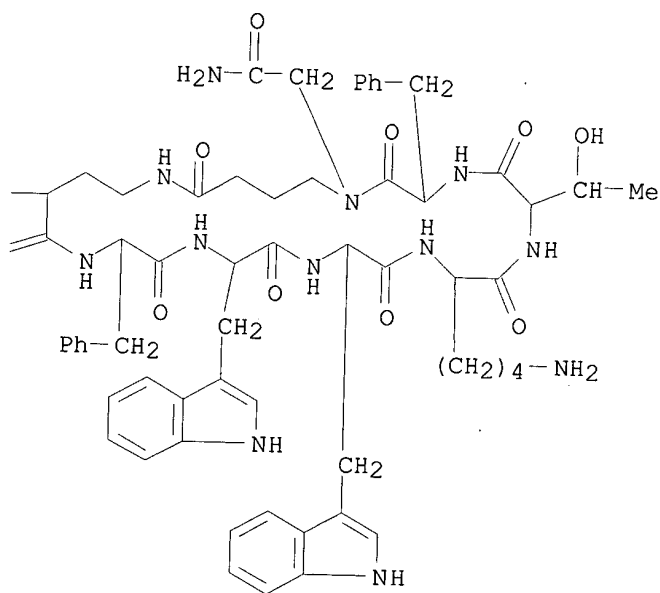
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LC STN Files: CA, CAPLUS, TOXCENTER

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1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 15 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN 446311-64-4 REGISTRY

CN Rhenate(1-), [N-[(mercapto-.kappa.S)acetyl]-3-[[mercapto-

.kappa.S)acetyl]amino-.kappa.N]alanyl-.kappa.N-.beta.-alanyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (10.fwdarw.3)-lactamato(4-)]oxo-, hydrogen, (SP-5-35)-(9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE

SQL 10

NTE metal complex

modified (modifications unspecified)

type	-----	location	-----	description
bridge	Dab-3	-	Gly-10	covalent bridge
uncommon	Bal-2	-	-	-
uncommon	Dab-3	-	-	-
stereo	Trp-6	-	-	D

SEQ 1 AXXFWWKTFG

=====

HITS AT: 4-10

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

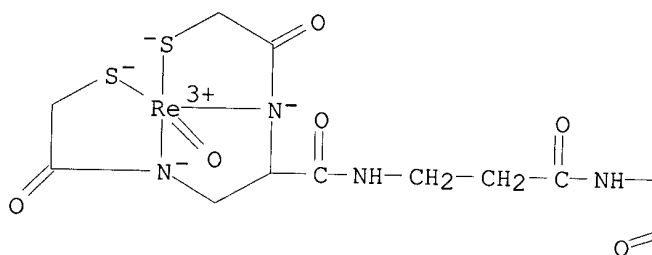
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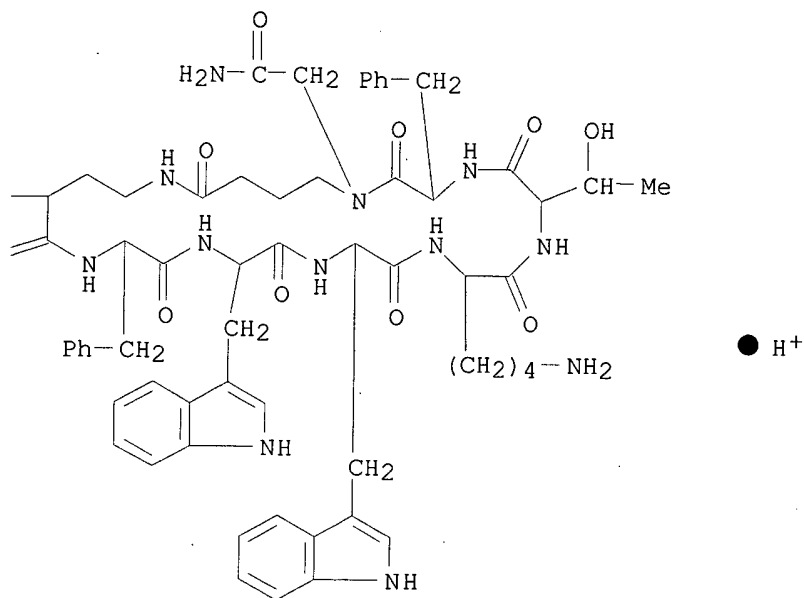
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LC STN Files: CA, CAPLUS, TOXCENTER

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1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 16 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN **446311-63-3** REGISTRY

CN Rhenium, [glycyl-.kappa.N-2-[[ (mercapto-.kappa.S)acetyl]amino-.kappa.N]-.beta.-alanyl-.kappa.N-glycyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (11.fwdarw.4)-lactamato(3-)]oxo-, (SP-5-24)-(9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE

SQL 10

NTE metal complex  
 modified (modifications unspecified)

type	-----	location	-----	description
bridge	Dab-3	-	Gly-10	covalent bridge
uncommon	Dab-3	-	-	-
stereo	Trp-6	-	-	D

SEQ 1 AGXFWWKTFG

HITS AT: 4-10

**\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\***

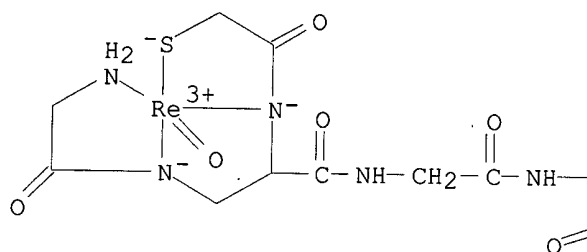
MF C69 H86 N17 O15 Re S

CI CCS

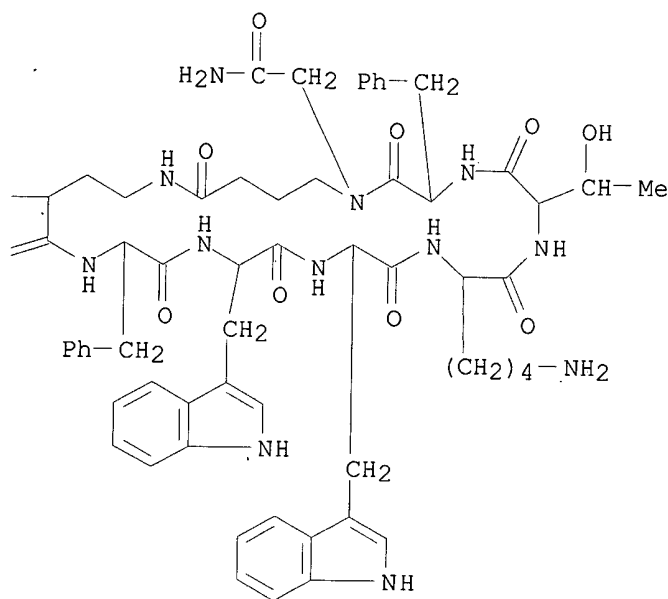
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LC STN Files: CA, CAPLUS, TOXCENTER

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1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 17 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN **446311-62-2** REGISTRY  
 CN Rhenate(1-), [N-[(mercapto-.kappa.S)acetyl]-3-[[mercapto-.kappa.S)acetyl]amino-.kappa.N]alanyl-.kappa.N-glycyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (10.fwdarw.3)-lactamato(4-)]oxo-, hydrogen, (SP-5-35)- (9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE  
 SQL 10  
 NTE metal complex  
 modified (modifications unspecified)

type	location	description
bridge	Dab-3 - Gly-10	covalent bridge

uncommon	Dab-3	-	-
stereo	Trp-6	-	D

SEQ 1 AGXFWWKTFG

=====

HITS AT: 4-10

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

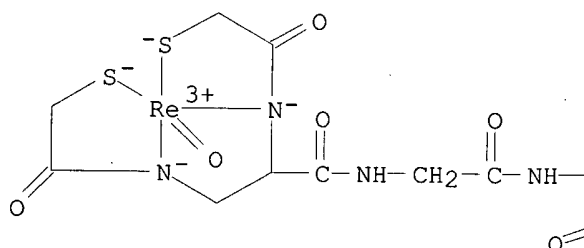
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CI CCS

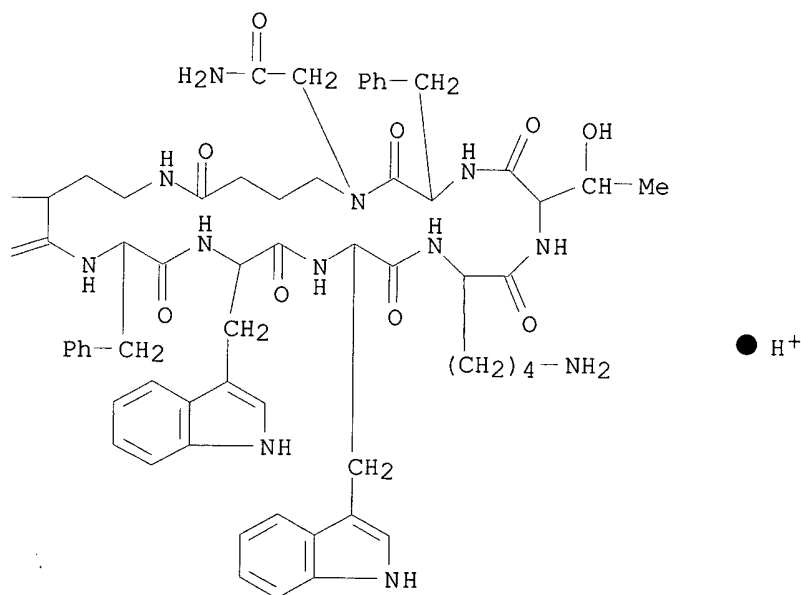
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LC STN Files: CA, CAPLUS, TOXCENTER

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1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 18 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 446311-61-1 REGISTRY

type	location	description
bridge	Dab-2 - Gly-9	covalent bridge
uncommon	Dab-2 -	-
stereo	Trp-5 -	D

HITS AT: 3-9

LC STN Files: CA, CAPLUS, TOXCENTER

The chemical structure shows a rhenium (Re) complex with a 3+ charge. The Re atom is coordinated by a macrocyclic ligand (a 12-membered ring with four nitrogen atoms and two sulfur atoms) and a sulfonamide derivative. The sulfonamide derivative consists of a benzene ring attached to a methylene group, which is further attached to a sulfonamide group (SO<sub>2</sub>NH<sub>2</sub>). The macrocyclic ligand is also substituted with a phenyl group (Ph-CH<sub>2</sub>) and a 4-aminobutyl group ((CH<sub>2</sub>)<sub>4</sub>-NH<sub>2</sub>). The structure is highly complex, with multiple amide and sulfonamide groups, and a large macrocyclic ring system.



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1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 19 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN **446311-60-0** REGISTRY  
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 .kappa.S)acetyl]amino-.kappa.N]alanyl-.kappa.N-(2S)-2,4-diaminobutanoyl-L-  
 phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-  
 N2-(3-carboxypropyl)glycinamide (9.fwdarw.2)-lactamato(4-)]oxo-, hydrogen,  
 (SP-5-35)- (9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE  
 SQL 9  
 NTE metal complex  
 modified (modifications unspecified)

type	----- location -----	description
bridge	Dab-2 - Gly-9	covalent bridge
uncommon	Dab-2 -	-
stereo	Trp-5 -	D

SEQ 1 AXFWWKTFG

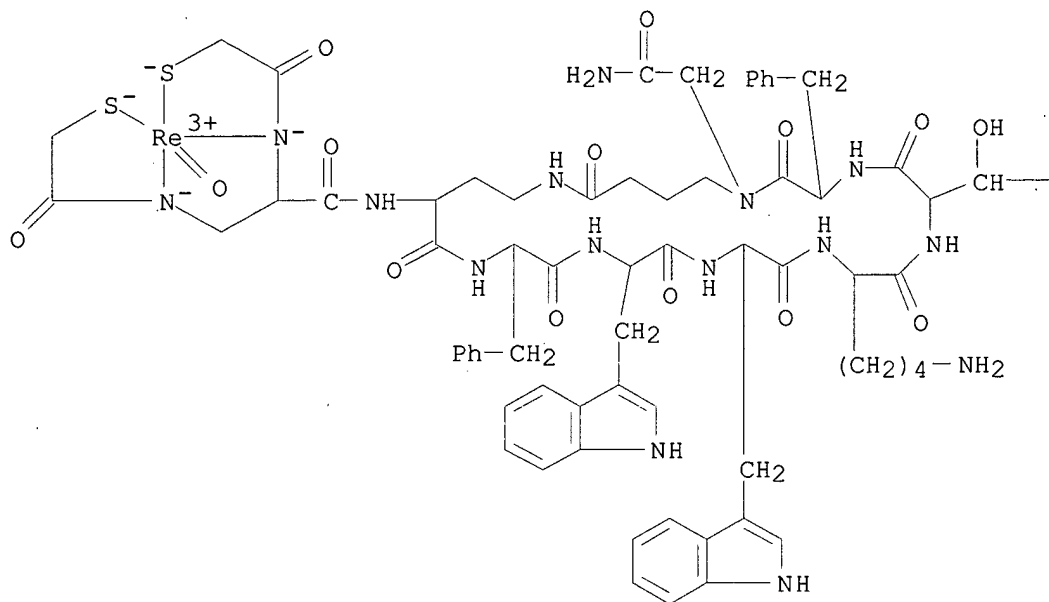
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HITS AT: 3-9

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

MF C67 H81 N15 O14 Re S2 . H  
 CI CCS  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER

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— Me

● H<sup>+</sup>

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 20 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN 446311-59-7 REGISTRY

CN Glycinamide, 3-amino-N-[3-(aminomethyl)benzoyl]alanyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)-, (8.fwdarw.13)-lactam (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

NTE modified (modifications unspecified)

type	location	description
bridge	Dpr-1	- Gly-8
uncommon	Dpr-1	-

stereo Trp-4 - D

SEQ 1 XFWWKTFG

HITS AT: 2-8

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

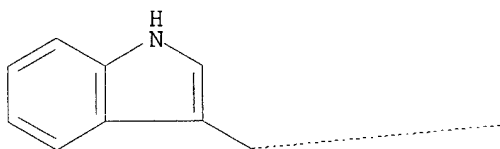
MF C67 H80 N14 O11

SR CA

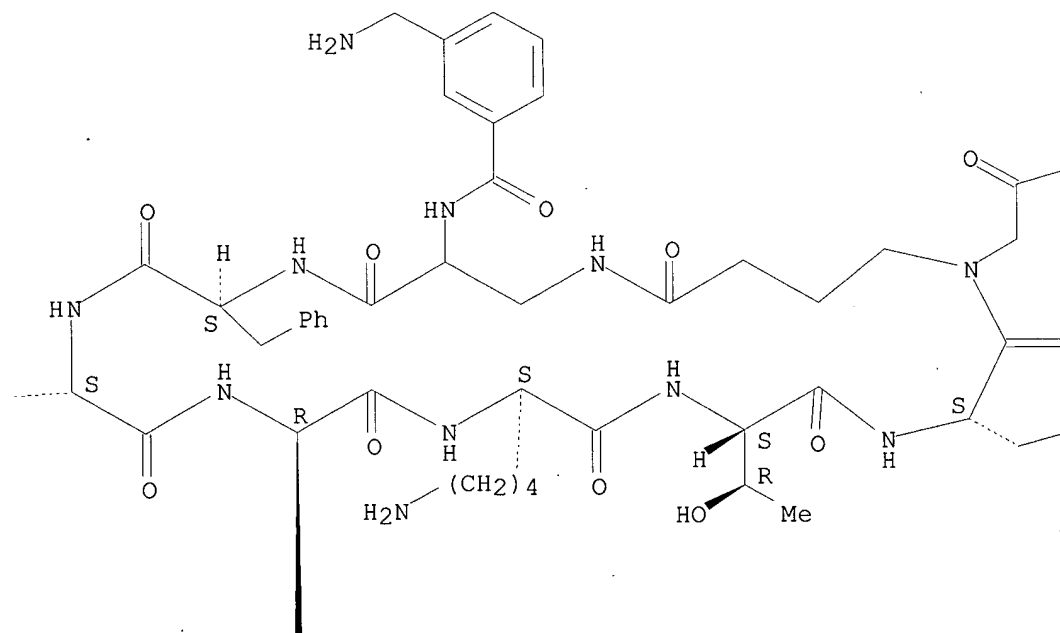
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

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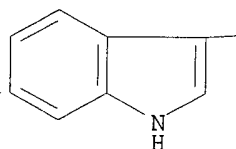
PAGE 1-C

—NH<sub>2</sub>

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PAGE 2-A



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\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 21 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN **446311-58-6** REGISTRY

CN Glycinamide, 3-amino-N-(5-amino-1-oxopentyl)alanyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)-, (8.fwdarw.13)-lactam (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

NTE modified (modifications unspecified)

type	location	description
bridge	Dpr-1 - Gly-8	covalent bridge
uncommon	Dpr-1 -	-
stereo	Trp-4 -	D

SEQ 1 XFWWKTFG

HITS AT: 2-8

\*\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

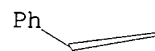
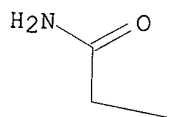
MF C64 H82 N14 O11

SR CA

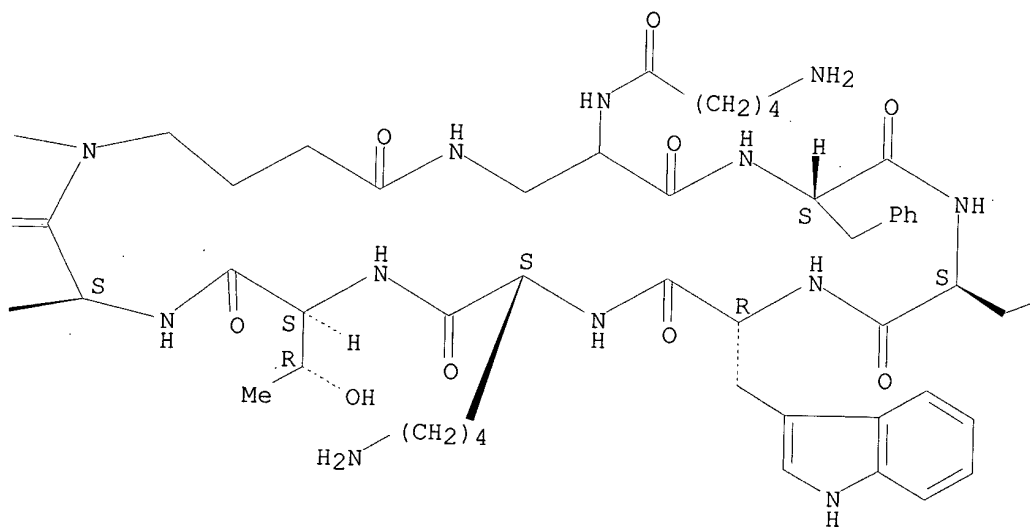
LC STN Files: CA, CAPLUS, TOXCENTER

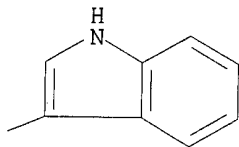
Absolute stereochemistry.

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PAGE 1-B





\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 22 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN **446311-57-5** REGISTRY  
 CN Glycinamide, 3-amino-N-(4-amino-1-oxobutyl)alanyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)-, (8.fwdarw.13)-lactam (9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 8  
 NTE modified (modifications unspecified)

type	location	description
bridge	Dpr-1 - Gly-8	covalent bridge
uncommon	Dpr-1 -	-
stereo	Trp-4 -	D

SEQ 1 XFWWKTFG  
 =====

HITS AT: 2-8

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

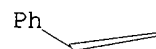
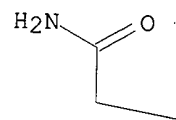
MF C63 H80 N14 O11

SR CA

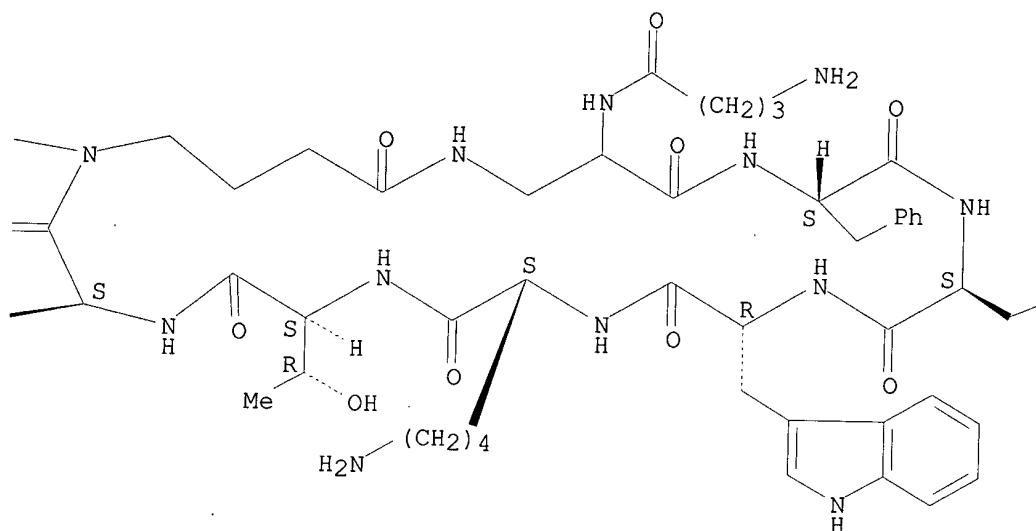
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

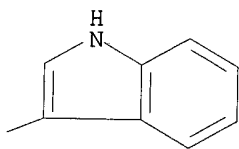
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\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- 1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 23 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN **446311-56-4** REGISTRY  
 CN Glycinamide, .beta.-alanyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)-, (9.fwdarw.2)-lactam (9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 9  
 NTE modified (modifications unspecified)

type	location		description
bridge	Dab-2	- Gly-9	covalent bridge
uncommon	Bal-1	-	-
uncommon	Dab-2	-	-
stereo	Trp-5	-	D

SEQ 1 XXFWWKTFG

=====

HITS AT: 3-9

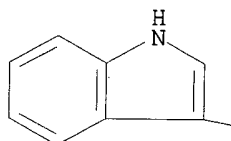
MF C63 H80 N14 O11

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

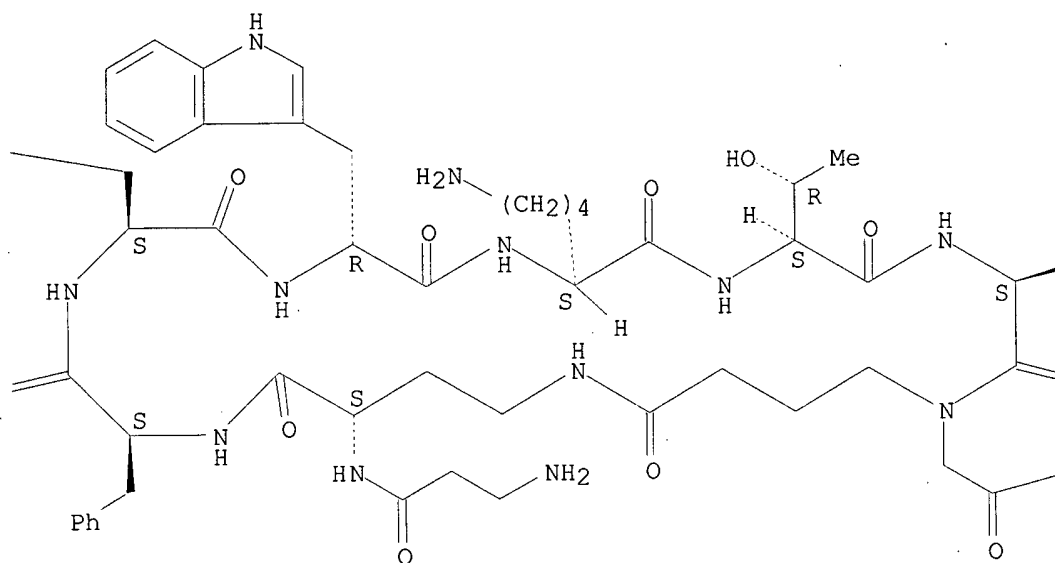
Absolute stereochemistry.

PAGE 1-A

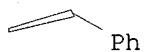




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\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 24 OF 42 REGISTRY. COPYRIGHT 2003 ACS on STN  
 RN **446311-55-3** REGISTRY  
 CN Glycinamide, (2S)-2,4-diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)-, (8.fwdarw.1)-lactam (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH  
SQL 8  
NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge	Dab-1	-	Gly-8	covalent bridge
uncommon	Dab-1	-	-	-
stereo	Trp-4	-	-	D

SEQ 1 XFWWKTFG

=====

HITS AT: 2-8

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

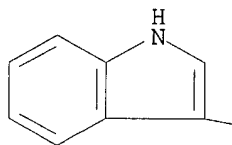
MF C60 H75 N13 O10

SR CA

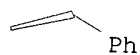
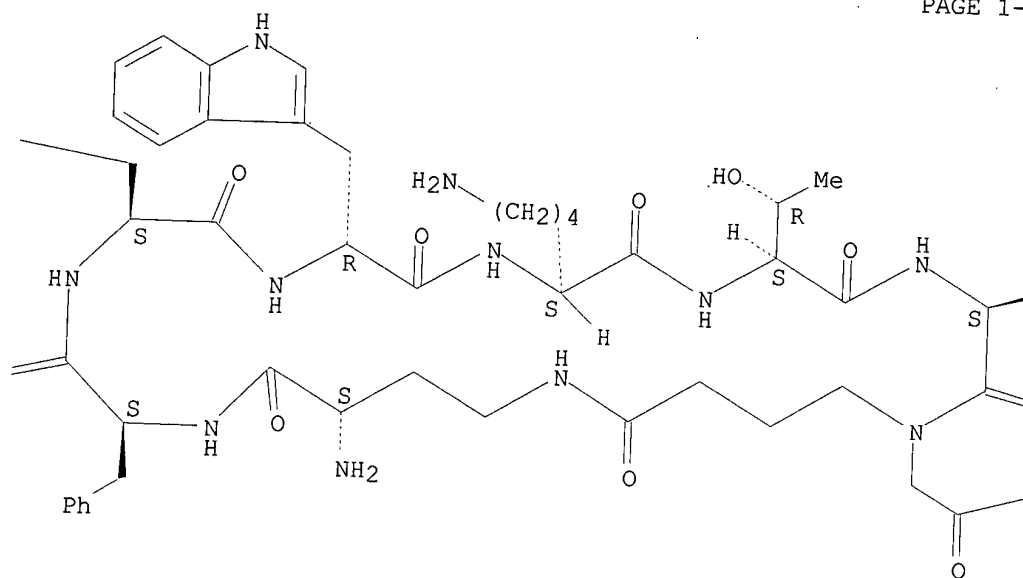
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

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\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 25 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN **446311-54-2** REGISTRY  
 CN Glycinamide, glycyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)-, (9.fwdarw.2)-lactam (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 9  
 NTE modified (modifications unspecified)

type	location		description
bridge	Dab-2	- Gly-9	covalent bridge
uncommon	Dab-2	-	-
stereo	Trp-5	-	D

SEQ 1 GXFWWKTFG

=====

HITS AT: 3-9

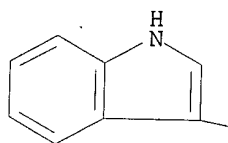
MF C62 H78 N14 O11

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

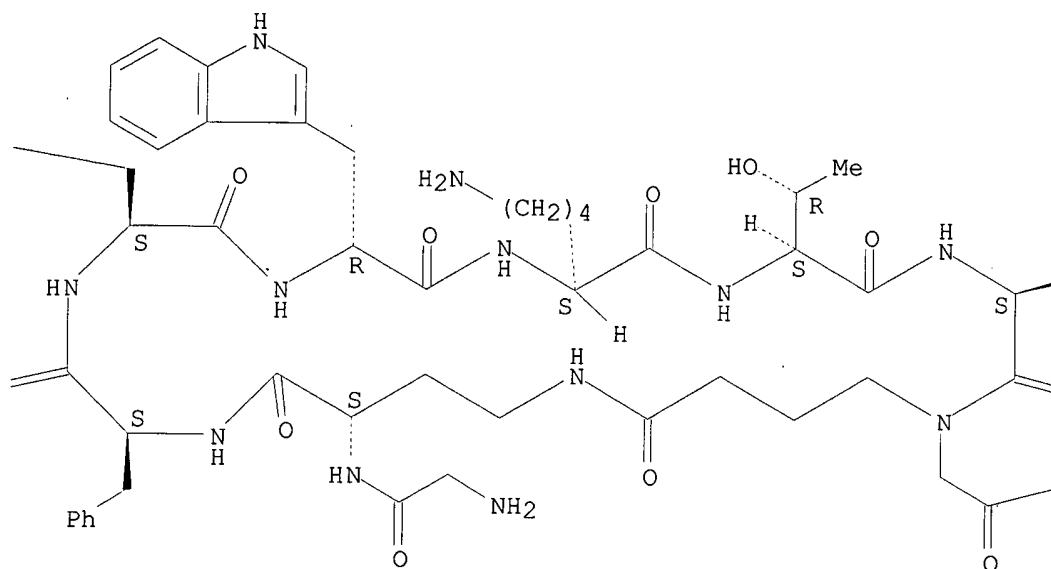
Absolute stereochemistry.

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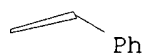


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\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 26 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN **446311-53-1** REGISTRY

CN Glycinamide, N-(4-amino-1-oxobutyl)-L-phenylalanyl-L-tryptophyl-D-tryptophyl-D-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)-, (7.fwdarw.1)-lactam (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 7  
 NTE modified (modifications unspecified)

type	location		description
bridge	Phe-1	- Gly-7	covalent bridge
stereo	Trp-3	-	D
stereo	Lys-4	-	D

SEQ 1 FWWKTFG  
 =====

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

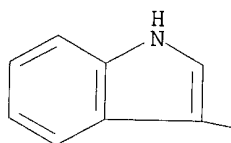
MF C60 H74 N12 O10

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

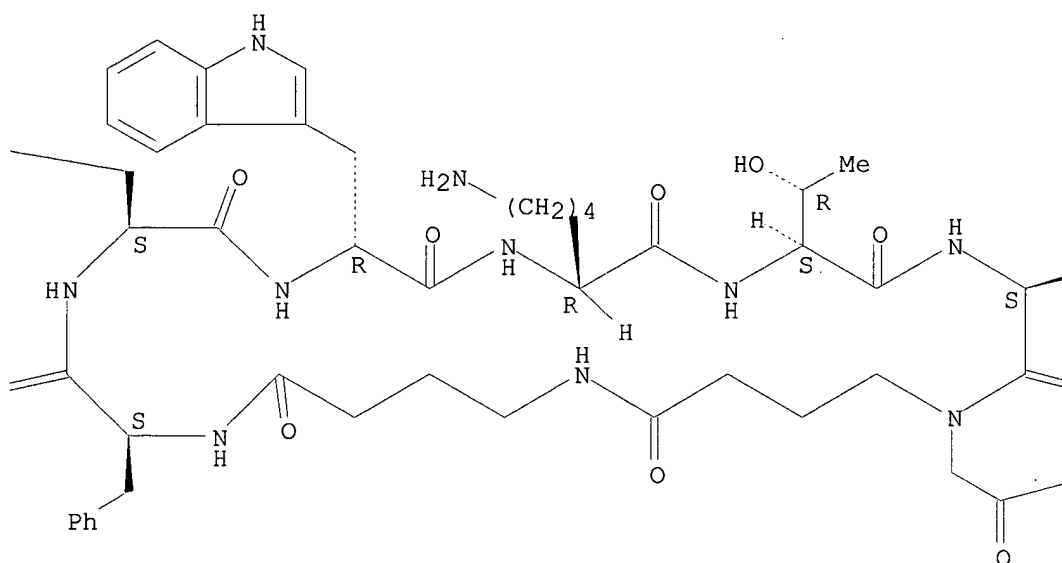
Absolute stereochemistry.

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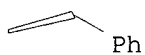


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\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 27 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN **446311-52-0** REGISTRY  
 CN Glycinamide, N-[[[(3-aminopropyl)amino]carbonyl]-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypyrrolyl)-, (7.fwdarw.1)-lactam (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 7  
 NTE modified (modifications unspecified)

type	location	description
bridge	Phe-1 - Gly-7	covalent bridge
stereo	Trp-3 -	D

SEQ 1 FWWKTFG

HITS AT: 1-7

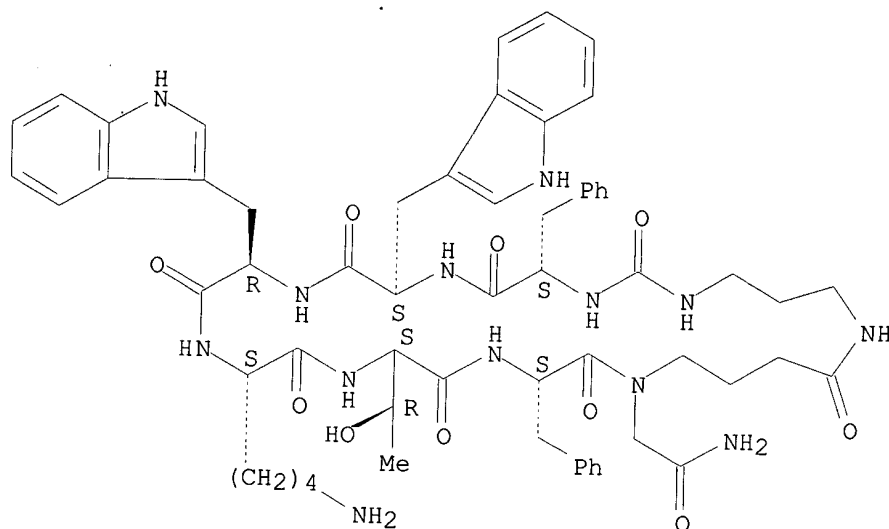
\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

MF C60 H75 N13 O10

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA.
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 28 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 446311-50-8 REGISTRY  
 CN Glycinamide, N-[[[(2-aminoethyl)amino]carbonyl]-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)-, (7.fwdarw.1)-lactam (9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 7  
 NTE modified (modifications unspecified)

type	location	description
------	----------	-------------



bridge	Phe-1	- Gly-7	covalent bridge
stereo	Trp-3	-	D

SEQ 1 FWWKTFG

HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

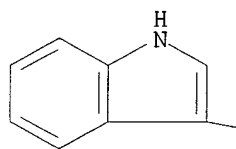
MF C59 H73 N13 O10

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

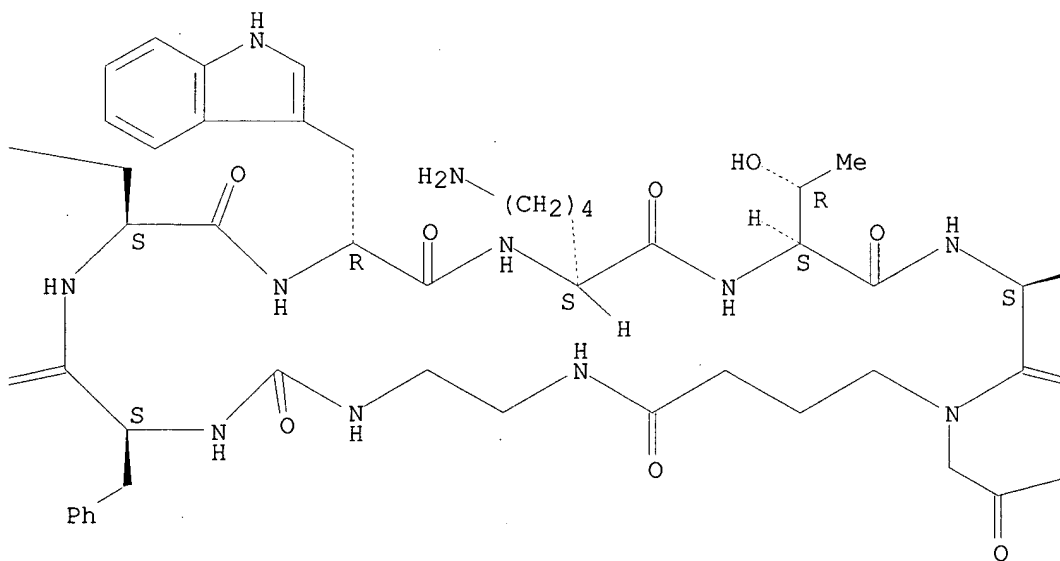
Absolute stereochemistry.

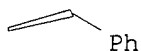
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\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 29 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN **446311-49-5** REGISTRY

CN Glycinamide, L-.alpha.-glutamyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-aminopropyl)-, (1.fwdarw.8)-lactam (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge		Glu-1	- Gly-8	covalent bridge
stereo		Trp-4	-	D

SEQ 1 EFWWKTFG

=====

HITS AT: 2-8

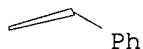
MF C60 H75 N13 O10

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.





\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 30 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN **446311-47-3** REGISTRY  
 CN Glycinamide, N-[(2Z)-3-carboxy-1-oxo-2-propenyl]-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-aminopropyl)-, (1.fwdarw.7)-lactam (9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 7  
 NTE modified (modifications unspecified)

type	location	description
bridge	Phe-1 - Gly-7	covalent bridge
stereo	Trp-3 -	D

SEQ 1 FWWKTFG

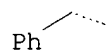
HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

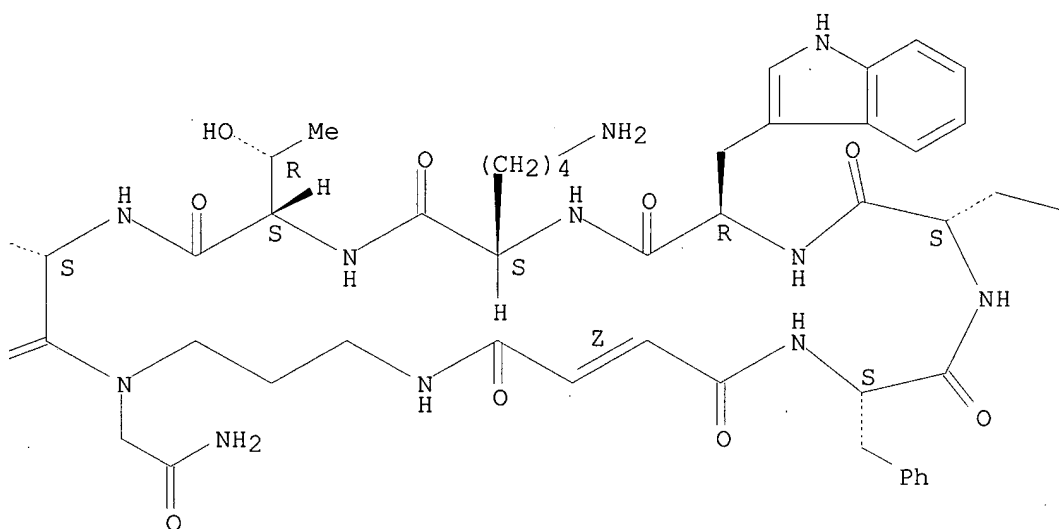
MF C59 H70 N12 O10  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.  
 Double bond geometry as described by E or Z.

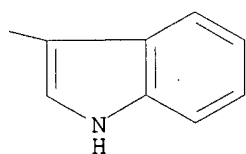
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\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 31 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN **446311-46-2** REGISTRY  
 CN Glycinamide, N-(2-carboxybenzoyl)-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-aminopropyl)-, (1.fwdarw.7)-lactam (9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 7  
 NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge	Phe-1	-	Gly-7	covalent bridge
stereo	Trp-3	-	-	D

SEQ 1 FWWKTFG

=====

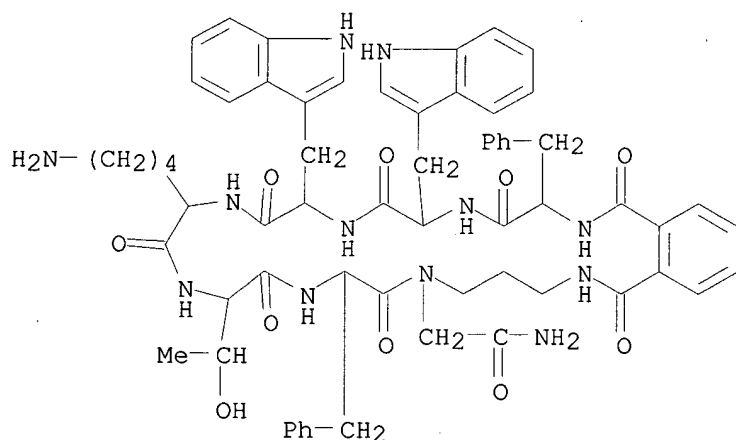
HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

MF C63 H72 N12 O10

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 32 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN **446311-45-1** REGISTRY  
 CN Glycinamide, N-[(2-carboxycyclopropyl)carbonyl]-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-

aminopropyl)-, (1.fwdarw.7)-lactam (9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 7  
 NTE modified (modifications unspecified)

type	location	description
bridge	Phe-1 - Gly-7	covalent bridge
stereo	Trp-3 -	D

SEQ 1 FWWKTFG

=====

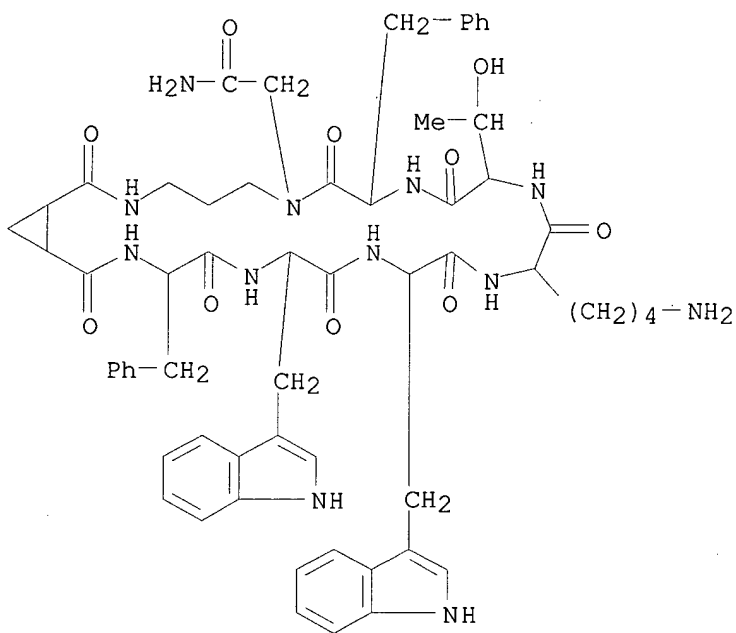
HITS AT: 1-7

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

MF C60 H72 N12 O10

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 33 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN **425428-86-0** REGISTRY

CN Glycinamide, 3-(2-naphthalenyl)-D-alanyl-N-(2-mercaptoethyl)glycyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (2.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 9

NTE modified (modifications unspecified)

type	-----	location -----	description
bridge	Gly-2	- Gly-9	covalent bridge
stereo	Ala-1	-	D
stereo	Trp-5	-	D

.SEQ 1 AGFWWKTFG

=====

HITS AT: 3-9

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

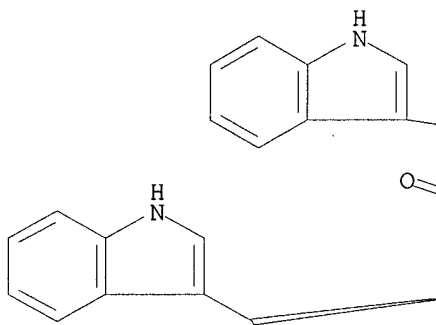
MF C71 H83 N13 O10 S2

SR CA

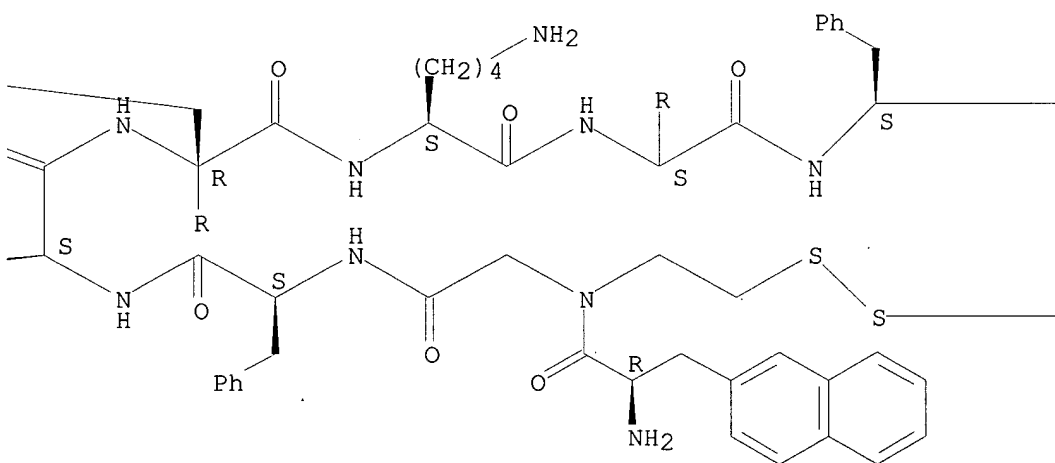
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

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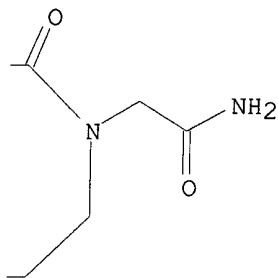


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\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1947 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 136:386384

L26 ANSWER 34 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN 255850-87-4 REGISTRY

CN Glycinamide, (2S)-4-amino-2-[(6-deoxy-.alpha.-D-galactopyranos-6-yl)amino]butanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)-, (8.fwdarw.1)-lactam (9CI)  
 (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge	Dab-1	-	Gly-8	covalent bridge
uncommon	Dab-1	-	-	-
stereo	Trp-4	-	-	D

SEQ 1 XFWWKTFG

HITS AT: 2-8

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

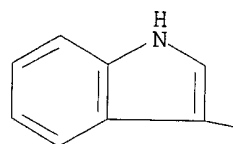
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SR CA

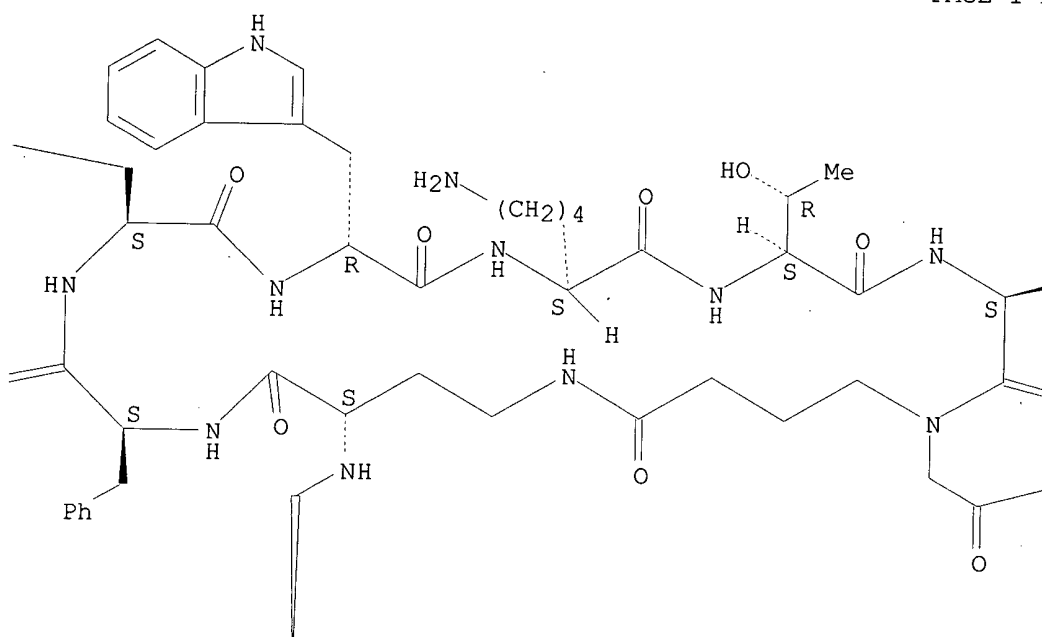
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Absolute stereochemistry.

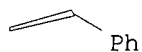
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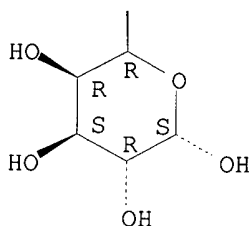
PAGE 1-B



PAGE 1-C



PAGE 2-B



2 REFERENCES IN FILE CA (1947 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 136:341003

REFERENCE 2: 132:108301

L26 ANSWER 35 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN **252845-48-0** REGISTRY

CN Glycinamide, 3-(1-naphthalenyl)-D-alanyl-N-(2-mercaptoethyl)glycyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (2.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3221

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 9

NTE modified (modifications unspecified)

type	----- location -----		description
bridge	Gly-2	- Gly-9	covalent bridge
stereo	Ala-1	-	D
stereo	Trp-5	-	D

SEQ 1 AGFWWKTFG

=====

HITS AT: 3-9

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

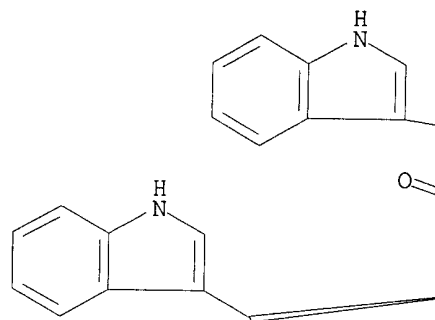
MF C71 H83 N13 O10 S2

SR CA

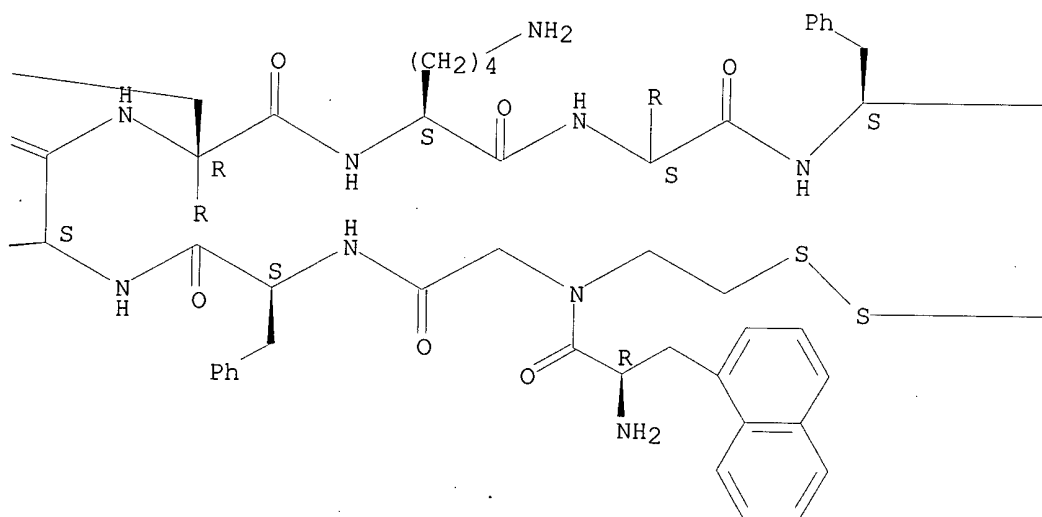
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

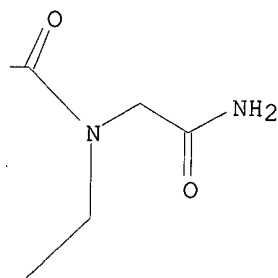
PAGE 1-A



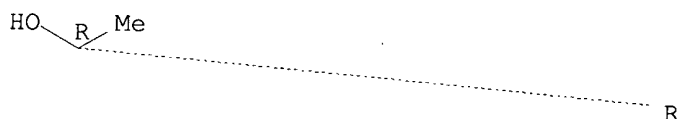
PAGE 1-B



PAGE 1-C



PAGE 2-A



3 REFERENCES IN FILE CA (1947 TO DATE)  
 3 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 138:117735

REFERENCE 2: 136:341003

REFERENCE 3: 132:50250

L26 ANSWER 36 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN **252845-47-9** REGISTRY

CN Glycinamide, D-phenylalanyl-N-(2-mercaptoethyl)glycyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (2.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3219

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 9

NTE modified (modifications unspecified)

type	----- location -----		description
bridge	Gly-2	- Gly-9	covalent bridge
stereo	Phe-1	-	D
stereo	Trp-5	-	D

SEQ 1. FGFWWKTFG

=====

HITS AT: 3-9

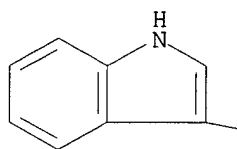
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SR CA

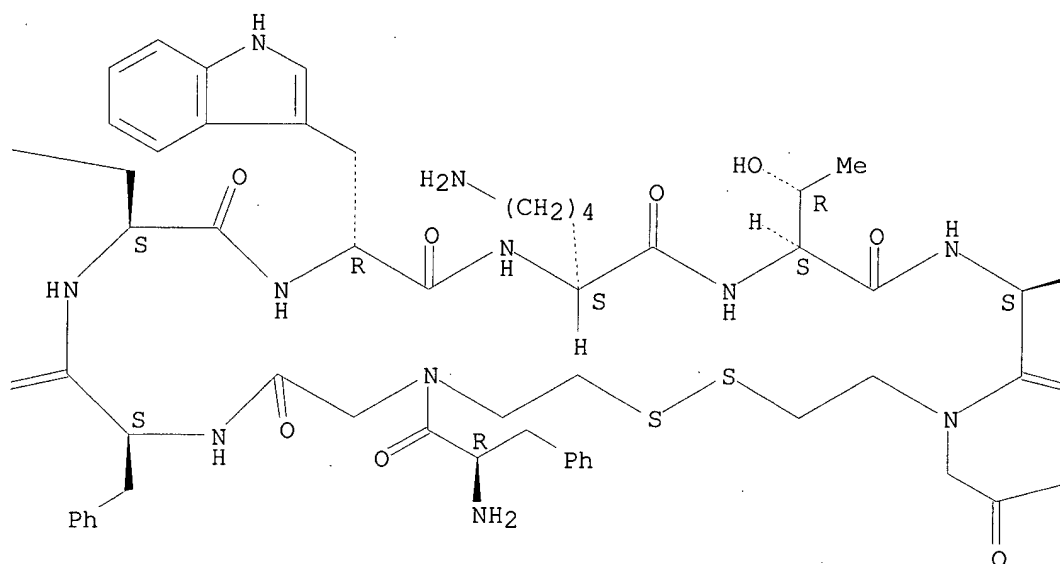
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

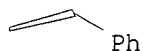
Absolute stereochemistry.

PAGE 1-A



PAGE 1-B





4 REFERENCES IN FILE CA (1947 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 138:117735

REFERENCE 2: 136:386384

REFERENCE 3: 136:341003

REFERENCE 4: 132:50250

L26 ANSWER 37 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN **252845-46-8** REGISTRY

CN Glycinamide, N-(3-mercapto-1-oxopropyl)-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (1.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3217

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge	Mpa-1	-	Gly-8	covalent bridge
uncommon	Mpa-1	-	-	-
stereo	Trp-4	-	-	D

SEQ 1 XFWWKTFG

=====

HITS AT: 2-8

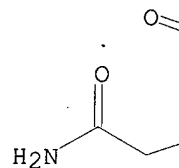
MF C57 H69 N11 O9 S2

SR CA

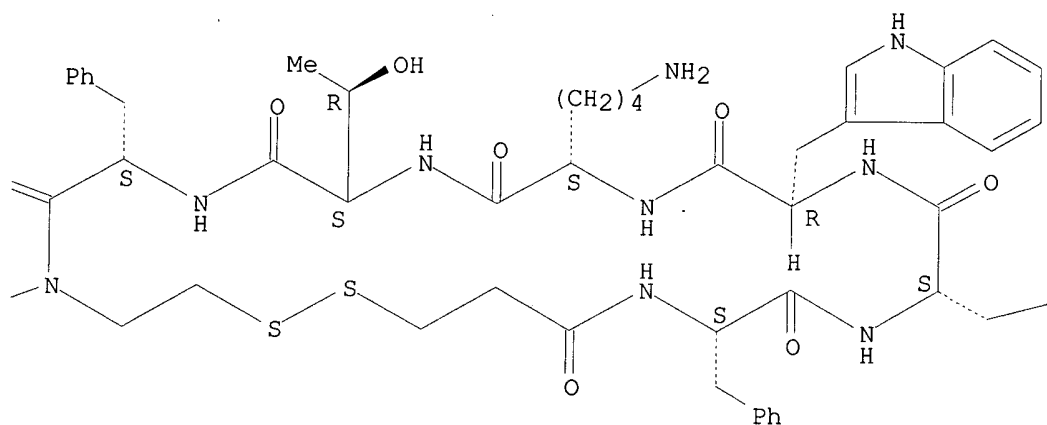
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

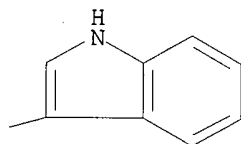
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PAGE 1-B



PAGE 1-C



4 REFERENCES IN FILE CA (1947 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 138:117735

REFERENCE 2: 136:386384



REFERENCE 3: 136:341003

REFERENCE 4: 132:50250

L26 ANSWER 38 OF 42 REGISTRY COPYRIGHT 2003.ACS on STN

RN 252845-45-7 REGISTRY

CN Glycinamide, N-(2-mercaptoethyl)glycyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (1.fwdarw.8)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3213

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

NTE modified (modifications unspecified)

type	-----	location -----	description
bridge	Gly-1	- Gly-8	covalent bridge
stereo	Trp-4	-	D

SEQ 1 GFWWKTFG

=====

HITS AT: 2-8

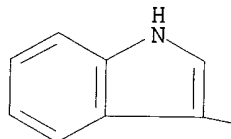
MF C58 H72 N12 O9 S2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

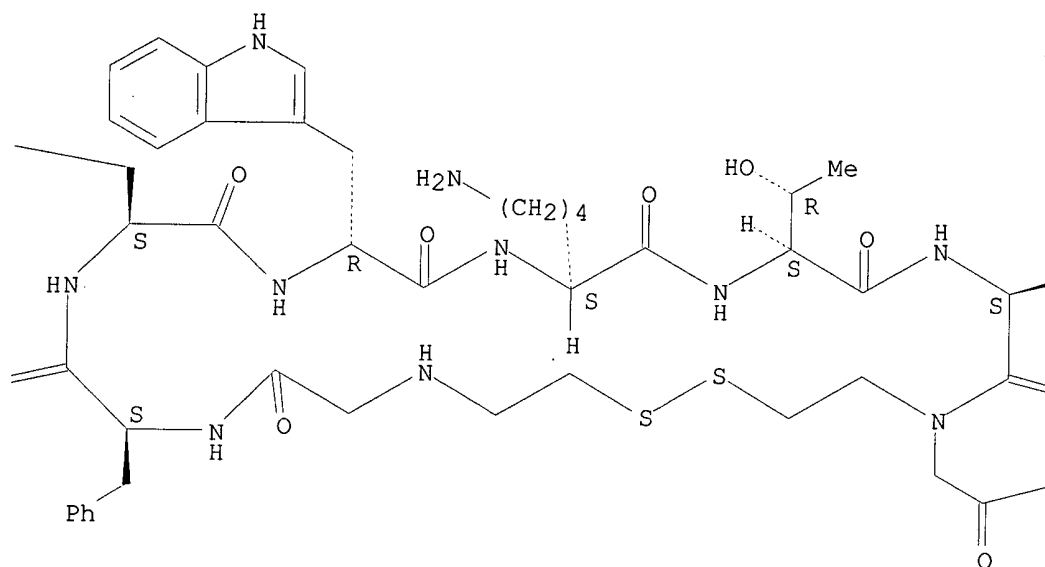
Absolute stereochemistry.

PAGE 1-A

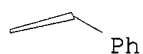


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4 REFERENCES IN FILE CA (1947 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 138:117735

REFERENCE 2: 136:386384

REFERENCE 3: 136:341003

REFERENCE 4: 132:50250

L26 ANSWER 39 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN 252845-44-6 REGISTRY

CN Glycinamide, N-(mercaptoacetyl)-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-

lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic  
(1.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

## OTHER NAMES:

CN PTR 3211

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

NTE modified (modifications unspecified)

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bridge	Maa-1 - Gly-8	covalent bridge
uncommon	Maa-1 -	-
stereo	Trp-4 -	D

SEQ 1 XFWWKTFG

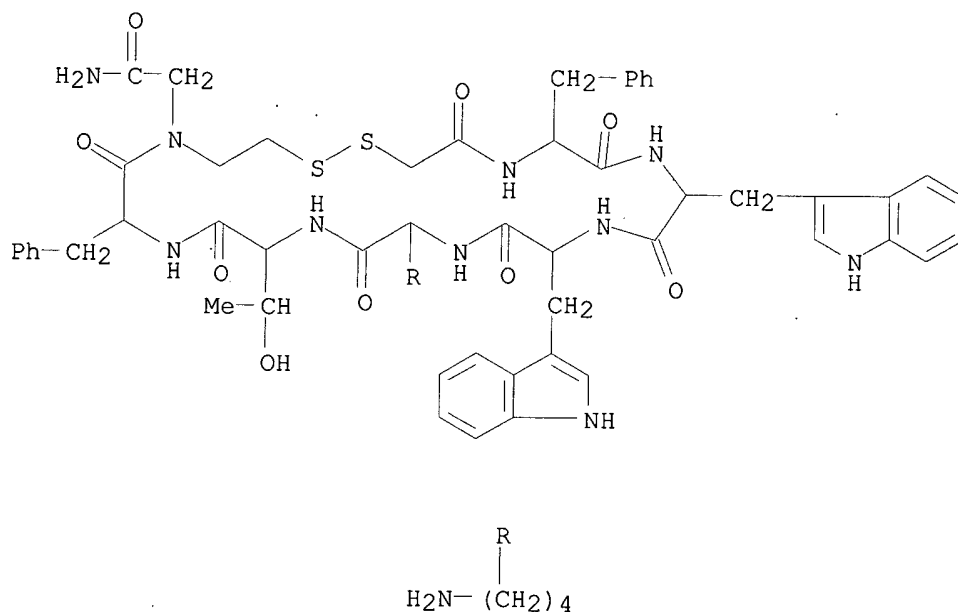
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HITS AT: 2-8

MF C56 H67 N11 O9 S2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



4 REFERENCES IN FILE CA (1947 TO DATE)

4 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 138:117735

REFERENCE 2: 136:386384

REFERENCE 3: 136:341003

REFERENCE 4: 132:50250

L26 ANSWER 40 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN 252845-43-5 REGISTRY

CN Glycinamide, D-phenylalanyl-L-cysteinyl-L-phenylalanyl-L-tryptophyl-D-

tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic  
(2.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)

## OTHER NAMES:

CN PTR 3207

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 9

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge	Cys-2	-	Gly-9	covalent bridge
stereo	Phe-1	-		D
stereo	Trp-5	-		D

SEQ 1 FCFWWKTFG

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HITS AT: 3-9

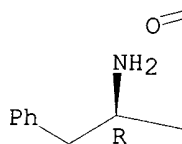
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SR CA

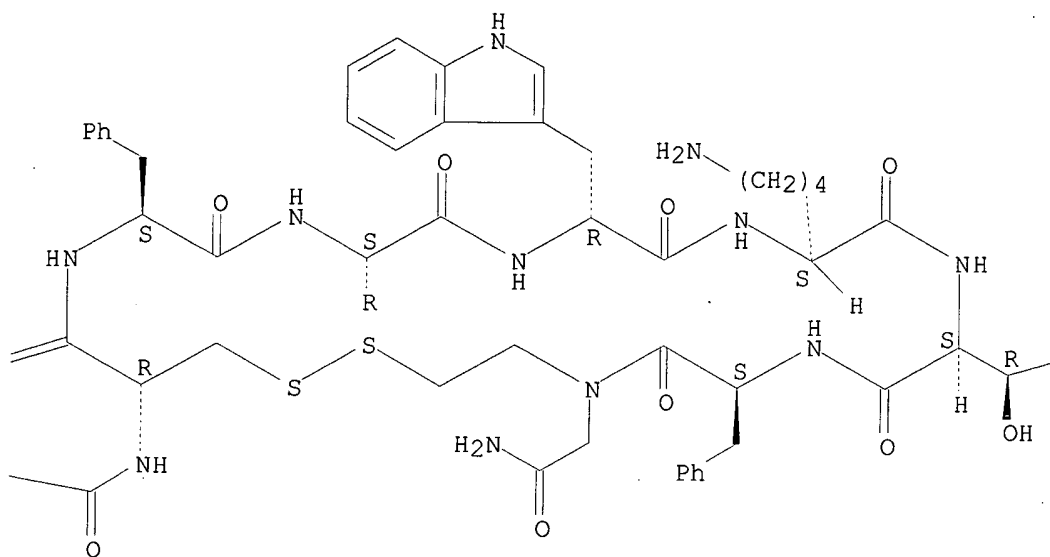
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A



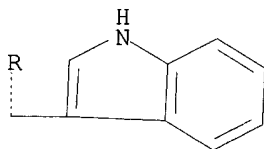
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PAGE 1-C

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PAGE 2-A



4 REFERENCES IN FILE CA (1947 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1947 TO DATE)

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REFERENCE 2: 136:386384
REFERENCE 3: 136:341003
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REFERENCE 4: 132:50250

L26 ANSWER 41 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN **252845-42-4** REGISTRY

CN Glycinamide, L-cysteinyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic  
(1.fwdarw.8)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3197

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

NTE modified (modifications unspecified)

type	----- location -----	description
bridge	Cys-1 - Gly-8	covalent bridge
stereo	Trp-4 -	D

SEQ 1 CFWWKTFG

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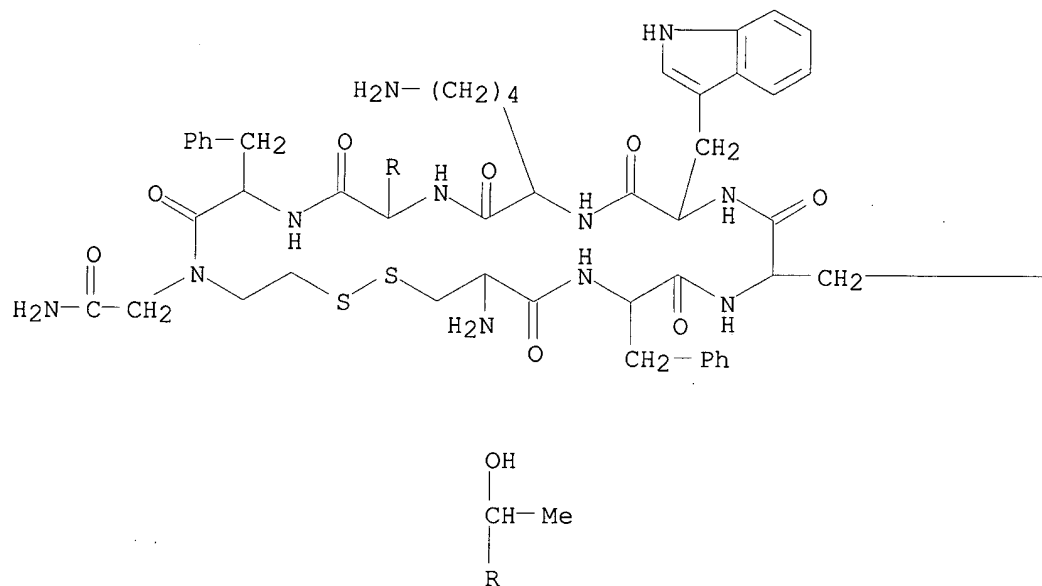
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MF C57 H70 N12 O9 S2

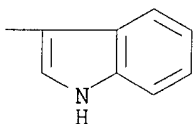
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LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

PAGE 1-A



PAGE 1-B



7 REFERENCES IN FILE CA (1947 TO DATE)  
 7 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 138:117735  
 REFERENCE 2: 136:386388  
 REFERENCE 3: 136:386384  
 REFERENCE 4: 136:341003  
 REFERENCE 5: 136:227293  
 REFERENCE 6: 136:151429  
 REFERENCE 7: 132:50250

L26 ANSWER 42 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN **252845-37-7** REGISTRY  
 CN Glycinamide, N-(4-amino-1-oxobutyl)-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)-, (7.fwdarw.1)-lactam (9CI) (CA INDEX NAME)

## OTHER NAMES:

CN PTR 3173  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 8  
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type	location	description
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uncommon	Oaa-1 -	-
stereo	Trp-4 -	D

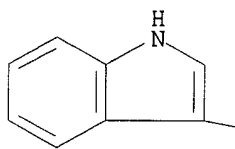
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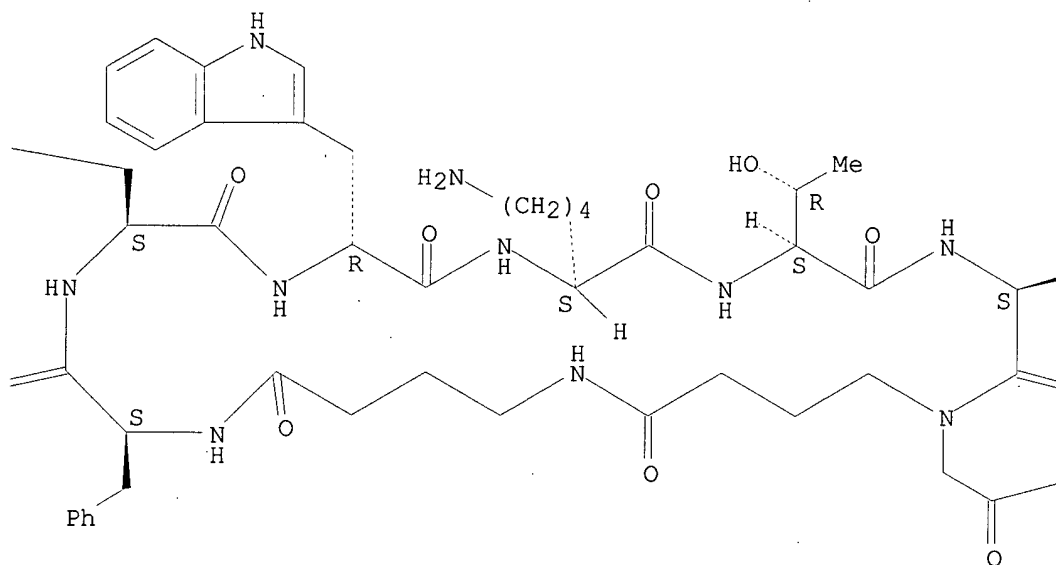
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 LC STN Files: BIOSIS, CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

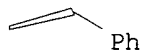
PAGE 1-A



PAGE 1-B







8 REFERENCES IN FILE CA (1947 TO DATE)  
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
8 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE	1:	138:117735
REFERENCE	2:	137:165559
REFERENCE	3:	136:386384
REFERENCE	4:	136:341003
REFERENCE	5:	136:227293
REFERENCE	6:	135:313821
REFERENCE	7:	134:95704
REFERENCE	8:	132:50250

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 FILE 'HCAPLUS' ENTERED AT 11:52:25 ON 22 JUL 2003  
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FILE COVERS 1907 - 22 Jul 2003 VOL 139 ISS 4  
 FILE LAST UPDATED: 21 Jul 2003 (20030721/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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 L22 11 SEA FILE=HCAPLUS ABB=ON PLU=ON L20  
 L23 5224 SEA FILE=REGISTRY ABB=ON PLU=ON SOMATO?  
 L24 89156 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 OR ?SOMATO?  
 L25 10 SEA FILE=HCAPLUS ABB=ON PLU=ON L22 AND L24  
 L27 467 SEA FILE=REGISTRY ABB=ON PLU=ON [FA][YAF]WK[TVSC].[GAF]/SQSP  
 L34 397 SEA FILE=REGISTRY ABB=ON PLU=ON L27 AND SQL>=7  
 L35 127 SEA FILE=REGISTRY ABB=ON PLU=ON L34 AND (CYCL? OR BRID? OR MULTICHA?)  
 L36 46 SEA FILE=HCAPLUS ABB=ON PLU=ON L35  
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 L79 16 SEA FILE=HCAPLUS ABB=ON PLU=ON L78  
 L80 13 SEA FILE=HCAPLUS ABB=ON PLU=ON L79 NOT (L25 OR L38 OR L57 OR L75 OR L70)

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L80 ANSWER 1 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 2001:827035 HCAPLUS  
 DOCUMENT NUMBER: 136:210716  
 TITLE: A bicyclic and Hsst2 selective somatostatin analogue:

AUTHOR(S): design, synthesis, conformational analysis and binding  
Falb, Eliezer; Salitra, Yoseph; Yechezkel, Tamar;  
Bracha, Moshe; Litman, Pninit; Olender, Roberto;  
Rosenfeld, Rakefet; Senderowitz, Hanoah; Jiang,  
Shaokai; Goodman, Murray  
CORPORATE SOURCE: Peptor Ltd., Rehovot, 76326, Israel  
SOURCE: Bioorganic & Medicinal Chemistry (2001), 9(12),  
3255-3264  
CODEN: BMECEP; ISSN: 0968-0896  
PUBLISHER: Elsevier Science Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB A backbone bridged and disulfide bridged bicyclic somatostatin analog, compd. 1 (PTR-3205), was designed and synthesized by solid-phase methodol. The binding of compd. 1 to the five different somatostatin receptors, expressed in CHO or COS-7 cells, indicate a high degree of selectivity towards hsstr2. The three-dimensional structure of this compd. has been detd. in DMSO-d6 and in water by 1H NMR and by mol. dynamics simulations. Similar backbone conformations were obsd. in both solvents. The authors have established direct evidence that the backbone of this bicyclic somatostatin analog assumes a 'folded' conformation in soln., where the lactam ring extends roughly in the plane of the .beta.-turn. The pharmacophoric region Phe-(d)-Trp-Lys-Thr of compd. 1 is in accord with that of both the Veber compd. L-363,301 (Merck) and sandostatin. The authors believe that the enhanced selectivity towards the hsst2 receptor, in comparison with other analogs, is due to its large hydrophobic region, composed of the lactam ring and the Phe side chains at positions 1 and 8.

IT 255872-38-9P 401912-36-5P

RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(bicyclic and hsst2 selective somatostatin analog: design, synthesis, conformational anal. and binding)

IT 401912-42-3DP, resin bound

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(bicyclic and hsst2 selective somatostatin analog: design, synthesis, conformational anal. and binding)

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L80 ANSWER 2 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:65930 HCAPLUS

DOCUMENT NUMBER: 132:77604

TITLE: Modulation of hormonal responses in animals with peptide vaccines

INVENTOR(S): Gerraty, Norman L.; Westbrook, Simon L.; Kingston, David J.

PATENT ASSIGNEE(S): Northstar Biologicals Pty. Ltd., Australia

SOURCE: S. African, 137 pp.

CODEN: SFXXAB

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ZA 9710584	A	19980819	ZA 1997-10584	19971125
PRIORITY APPLN. INFO.:			ZA 1997-10584	19971125
AB The authors disclose non-naturally occurring peptides with amino acid sequences derived from, or similar to, the native animal hormone, hormone-binding protein or receptor for hormone. These peptides are capable of eliciting a humoral immune response that modulates the activity				

of the native hormone or receptor in vivo. In one example, immunization of pregnant sows with a peptide based on somatostatin receptors, increased their liveweight gain and prodn. of milk at lactation. Immunization of piglets with the somatostatin receptor peptide increased their liveweight gain. In a second example, immunization of pregnant ewes resulted in greater liveweight gain of their lambs and, in addn., the wool follicle d. was significantly higher in the lambs.

IT 253791-02-5

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(immunization with peptides of animal hormones, their binding proteins, or receptors for immunol. control of endocrine function)

L80 ANSWER 3 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:53668 HCAPLUS

DOCUMENT NUMBER: 132:108301

TITLE: Processes for coupling amino acids using bis(trichloromethyl) carbonate

INVENTOR(S): Falb, Eliezer; Yechezkel, Tamar; Salitra, Yoseph

PATENT ASSIGNEE(S): Peptor Ltd., Israel

SOURCE: PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
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AU 9946454	A1	20000201	AU 1999-46454	19990711
AU 754560	B2	20021121		
EP 1097164	A1	20010509	EP 1999-929678	19990711
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
JP 2002520331	T2	20020709	JP 2000-559127	19990711
NZ 509304	A	20030131	NZ 1999-509304	19990711
US 2001007037	A1	20010705	US 2001-756223	20010109
US 6512092	B2	20030128		

PRIORITY APPLN. INFO.: IL 1998-125314 A 19980712

WO 1999-IL378 W 19990711

OTHER SOURCE(S): CASREACT 132:108301

AB A process is disclosed for using triphosgene as an efficient and effective coupling reagent during peptide synthesis, by in situ generation of amino acid chloride from a protected amino acid. This process is particularly useful for the coupling to sterically hindered amino acid residues or for other difficult couplings. Furthermore, the same reagent can be used for the derivatization of peptides by formation of an amide bond between a free amine on a peptide and a carboxylic acid or for the coupling of an amino acid to a solid support. Results for difficult peptide couplings using triphosgene are tabulated.

IT 255872-38-9P, PTR 3205 255872-39-0P, PTR 3227

RL: SPN (Synthetic preparation); PREP (Preparation)  
(processes for coupling amino acids using bis(trichloromethyl)  
carbonate)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L80 ANSWER 4 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:776177 HCAPLUS

DOCUMENT NUMBER: 128:33788

TITLE: Modulating the activity of hormones or their receptors

- peptides, antibodies, vaccines and uses thereof  
INVENTOR(S): Gerraty, Norman L.; Westbrook, Simon L.; Kingston,  
David J.

PATENT ASSIGNEE(S): Northstar Biologicals Pty. Ltd., Australia; Gerraty,  
Norman L.; Westbrook, Simon L.; Kingston, David J.

SOURCE: PCT Int. Appl., 139 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9744352	A1	19971127	WO 1997-AU312	19970522
W:				
AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,				
DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ,				
LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL,				
PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ,				
VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB,				
GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN,				
ML, MR, NE, SN, TD, TG				
AU 9727575	A1	19971209	AU 1997-27575	19970522
AU 738528	B2	20010920		
CN 1226896	A	19990825	CN 1997-196524	19970522
BR 9709038	A	20000104	BR 1997-9038	19970522
EP 1012171	A1	20000628	EP 1997-921529	19970522
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE, FI				
NZ 332926	A	20000825	NZ 1997-332926	19970522
JP 2000512130	T2	20000919	JP 1997-541271	19970522
NZ 337256	A	20010427	NZ 1997-337256	19970522
US 2002107187	A1	20020808	US 2001-758128	20010112
US 2002169116	A1	20021114	US 2001-758426	20010112
US 2002187925	A1	20021212	US 2001-758198	20010112
US 2003045676	A1	20030306	US 2001-861661	20010522
PRIORITY APPLN. INFO.:			AU 1996-9990	A 19960522
			NZ 1997-332926	A1 19970522
			WO 1997-AU312	W 19970522
			US 1999-194218	B3 19990205

AB This invention relates to immunogenic, non-naturally occurring peptides and immunol. reactive mols. derived from animal hormone, carrier protein, hormone binding protein or hormone receptor wherein the peptide is capable of eliciting antibodies to modulate the activity of hormone or receptor in vivo. These peptides are based on e.g. portions of somatostatin, somatostatin receptors and insulin-like growth factor binding protein. Methods of modulating hormonal activity in an animal to increase prodn. of fiber or milk are disclosed. Compns. and vaccine comprising these peptides are also contemplated.

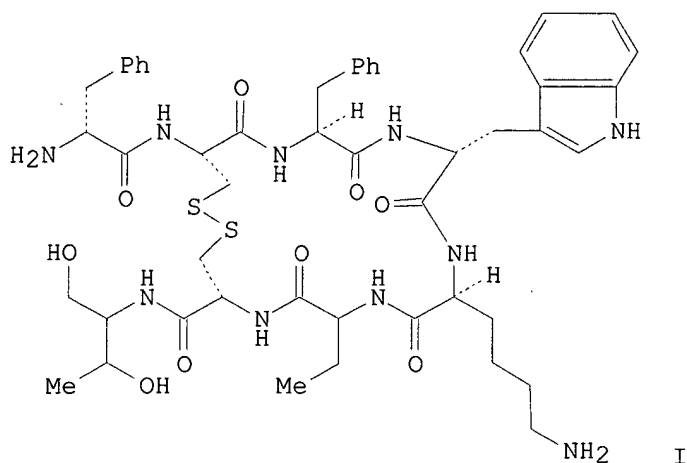
IT 199800-54-9P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(peptides, antibodies, vaccines for modulating hormones or hormone -  
receptor activity in animal)

L80 ANSWER 5 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1987:547527 HCAPLUS  
 DOCUMENT NUMBER: 107:147527  
 TITLE: Structure-activity studies of somatostatin analogs,  
 substituted at positions 4 and 5  
 AUTHOR(S): Sarantakis, D.  
 CORPORATE SOURCE: Res. Div., Wyeth Lab., Philadelphia, PA, 19101, USA  
 SOURCE: Pept., Proc. Eur. Pept. Symp., 19th (1987), Meeting  
 Date 1986, 535-8. Editor(s): Theodoropoulos,  
 Dimitrios. de Gruyter: Berlin, Fed. Rep. Ger.  
 CODEN: 56ABA8  
 DOCUMENT TYPE: Conference  
 LANGUAGE: English  
 AB Somatostatin analogs, substituted at positions 4 and 5, were tested for  
 their abilities to inhibit the release of growth hormone, insulin, and  
 glucagon. Structure-activity relations are discussed for the analogs with  
 regard to specificity and duration of biol. activity. Structural  
 variations included substitutions with neutral and(or) basic amino acids,  
 substitutions with D-amino acids, and mol. size (cyclic peptides).  
 IT **79698-22-9**  
 RL: BIOL (Biological study)  
 (glucagon and growth hormone and insulin secretion inhibition by,  
 structure in relation to)

L80 ANSWER 6 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1987:770 HCAPLUS  
 DOCUMENT NUMBER: 106:770  
 TITLE: Chemistry and pharmacology of SMS 201-995, a  
 long-acting octapeptide analog of somatostatin  
 AUTHOR(S): Pless, Janos; Bauer, Wilfried; Briner, Ulrich;  
 Doepfner, Wolfgang; Marbach, Peter; Maurer, Richard;  
 Petcher, Trevor J.; Reubi, Jean Claude; Vonderscher,  
 Jacky  
 CORPORATE SOURCE: Preclin. Res. Dep., SANDOZ Ltd., Basel, CH-4002,  
 Switz.  
 SOURCE: International Congress Series (1986),  
 683(Endocrinology '85), 319-33  
 CODEN: EXMDA4; ISSN: 0531-5131  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



AB Examn. of the structure-activity relations of a no. of somatostatin [38916-34-6] analogs led to the development of the potent selective, and long-acting analog SMS 201-995 (I) [83150-76-9]. I was resistant to degrading by rat brain or kidney homogenates, porcine gastric juice, or scrapings from rat intestinal mucosa. I selectively inhibited growth hormone (GH) [9002-72-6] secretion for .ltoreq.6 h after s.c. administration to several species and exhibited favorable GH/insulin [9004-10-8] and GH/glucagon [9007-92-5] ratios in rhesus monkeys. Addnl., I bound with high affinity to somatostatin receptors in rat pituitary and hamster pancreatic .beta.-cells and labeled a subset of somatostatin receptors in rat cortex. In Syrian hamsters with transplanted insulinomas, I inhibited the tumor growth and radiolabeled I bound to somatostatin receptors in rat brain and a human gonadotropin-releasing factor [9034-40-6]-secreting tumor of the jejunum. The stability and long duration of I may be useful in examn. of the therapeutic usefulness of somatostatin in various diseases esp. acromegaly, gastrointestinal tumors, and juvenile-onset diabetes.

IT **79486-62-7**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)  
(biol. activity of, mol. structure in relation to)

L80 ANSWER 7 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1984:449288 HCAPLUS  
DOCUMENT NUMBER: 101:49288  
TITLE: Octapeptides as antiulcer agents  
INVENTOR(S): Lien, Eric L.  
PATENT ASSIGNEE(S): American Home Products Corp., USA  
SOURCE: U.S., 3 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4443434	A	19840417	US 1982-409255	19820818
PRIORITY APPLN. INFO.:			US 1982-409255	19820818

AB The octapeptides, Phe-Cys-(SA)-Phe-D-Trp-Lys-Thr-Cys(SA)-Phe (where A = H or SA = dithioether bond) (I) and salts inhibit gastric and pancreatic secretions and reduce gastrointestinal blood flow in treatment of peptic

ulcer disease, acute pancreatitis and Zollinger-Ellison preoperational therapy. Thus, an octapeptide (I, the 2 SA groups = 2-7 disulfide bond) [79698-22-9] was injected into rats at 1 mg/kg. Thirty minutes following the start of the expt., 20 .mu.Ci/rat of 86RbCl was injected i.v. The rats were killed 20 s later by injection of Nembutal. The blood flow to the stomach was detd. by counting 86Rb in the dissected stomachs of the rats. The octapeptide decreases the gastrointestinal blood flow comparably to somatostatin.

IT **79698-22-9**

RL: BIOL (Biological study)  
(ulcer treatment with)

L80 ANSWER 8 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1984:68700 HCAPLUS

DOCUMENT NUMBER: 100:68700

TITLE: Structure-activity relationships of highly potent and specific octapeptide analogs of somatostatin

AUTHOR(S): Bauer, Wilfried; Briner, Ulrich; Doepfner, Wolfgang; Haller, Roland; Huguenin, Rene; Marbach, Peter; Petcher, Trevor J.; Pless, Janos

CORPORATE SOURCE: Preclin. Res. Dep., Sandoz Ltd., Basel, CH-4002, Switz.

SOURCE: Pept., Proc. Eur. Pept. Symp., 17th (1983), Meeting Date 1982, 583-8. Editor(s): Blaha, Karel; Malon, Petr. de Gruyter: Berlin, Fed. Rep. Ger. CODEN: 50GFAA

DOCUMENT TYPE: Conference

LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB Somatostatin octapeptide analogs I [X = H, D-Phe; Y = NH<sub>2</sub>, D-Ser(NH<sub>2</sub>), D-Thr(NH<sub>2</sub>), Ser(ol), Phe(ol), D-Thr(ol), Thr(ol)] were prepd. and their growth hormone inhibitory activities were detd. I [X = D-Phe, Y = Thr(ol)] showed the highest activity, selectivity, and longest duration of action.IT **88463-68-7P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. and cyclization of)

IT **88463-63-2P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. and deprotection of)

IT **79486-62-7P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and growth hormone inhibitory activity of)

L80 ANSWER 9 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1984:23016 HCAPLUS

DOCUMENT NUMBER: 100:23016

TITLE: Polypeptides, their pharmaceutical compositions and their use

INVENTOR(S): Bauer, Wilfried; Pless, Janos

PATENT ASSIGNEE(S): Sandoz A.-G., Switz.

SOURCE: U.S., 10 pp. Cont.-in-part of U.S. Ser. No. 20  
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4395403	A	19830726	US 1981-321663	19811116



ZA 8007421            A    19820728            ZA 1980-7421            19801127  
 PRIORITY APPLN. INFO.:            CH 1979-10524            19791127  
    CH 1980-4574            19800613  
    US 1980-208888            19801121

GI For diagram(s), see printed CA Issue.

AB Peptides I [R = C1-12 alkyl, C7-10 phenylalkyl, R5CO (R5 = H, C1-11 alkyl, Ph, C7-10 phenylalkyl), D- or L-aminoacyl, dipeptidyl; R1 = H, C1-12 alkyl, C7-10 phenylalkyl; X = (un)substituted Phe; X1 = D- or L-Trp, N.alpha.-methylated and/or benzene-ring-substituted D- or L-Trp; X2 = Lys, N.alpha.-methylated and/or N.epsilon.-C1-3 alkylated Lys; X3 = Thr, Ala, MeAla, MeThr, R2 = R3 = H, R2R3 = bond; R4 = CO2R6 (R6 = H, C1-3 alkyl), CH2OR7 (R7 = H, ester group), CONR8R9 [R8 = H, C1-3 alkyl, Ph, CH2Ph, C9-10 phenylalkyl; R9 = H, C1-3 alkyl, CHR10R11 [R10 = H, (CH2)nOH (n = 1, 2, 3), CHMeOH, CH2CHMe2, CH2Ph; R11 = CO2R6 (R6 = same), CH2OR7 (R7 = same), CONR12R13 (R12 = H, C1-3 alkyl; R13 = H, C1-3 alkyl, Ph, C7-10 phenylalkyl, CHR10R11)], CO-Pro-R14 [R14 = OR6 (R6 = same), NR12R13 (R12, R13 = same)], (un)esterified CO-Pro-ol] were prepd. as agents for inhibiting the release of growth hormone and gastric and pancreatic secretions. Thus, Z-Lys(Boc)-Thr-OMe (Z = PhCH2O2C, Boc = CO2CMe3) was Z-deblocked by hydrogenolysis and then coupled with Z-Phe-D-Tryp-OH by DCC/1-hydroxybenzotriazole (HOBt) in DMF to give Z-Phe-D-Trep-Lys(Boc)-Thr-OMe, which was Z-deblocked by hydrogenolysis and then coupled with Boc-D-Phe-Cys(MBzl)-OH (MBzl = CH2C6H4OMe-p) by DCC/HOBt in DMF to give Boc-D-Phe-Cys(MBzl)-Phe-D-Trp-Lys(Boc)-Thr-R15 (II, R15 = OMe), which was converted to II (R15 = NHNH2) (III). Boc-Cys(MBzl) was coupled with H-Thr-ol.HCl by ClCO2CH2CHMe2 in THF contg. N-methylmorpholine to give Boc-Cys(MBzl)-Thr-ol, which was Boc-deblocked and then coupled with III by the azide method to give Boc-D-Phe-Cys(MBzl)-Phe-D-Trp-Lys(Boc)-Thr-Cys(MBzl)-Thr-ol, which was deblocked and cyclized to give cyclic disulfide IV. IV had an ID50 of 0.09 .mu.g/kg (i.v.) for the inhibition of gastric juice secretion in rats.

IT **79486-63-8P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

L80 ANSWER 10 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1983:4797 HCAPLUS  
 DOCUMENT NUMBER: 98:4797  
 TITLE: Polypeptides and their use as drugs  
 INVENTOR(S): Bauer, Wilfried; Pless, Janos  
 PATENT ASSIGNEE(S): Sandoz A.-G., Switz.  
 SOURCE: Belg., 27 pp.  
           CODEN: BEXXAL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 892315	A1	19820901	BE 1982-10440	19820301
CH 647246	A	19850115	CH 1981-1531	19810306
DK 8200810	A	19820907	DK 1982-810	19820224
FI 8200689	A	19820907	FI 1982-689	19820226
FR 2501199	A1	19820910	FR 1982-3475	19820301
FR 2501199	B1	19860221		
DE 3207311	A1	19821202	DE 1982-3207311	19820301
GB 2095261	A	19820929	GB 1982-6136	19820302
GB 2095261	B2	19840815		
NL 8200828	A	19821001	NL 1982-828	19820302
US 4435385	A	19840306	US 1982-353900	19820302
SE 8201339	A	19820907	SE 1982-1339	19820304
CA 1188682	A1	19850611	CA 1982-397561	19820304

IL 65167	A1	19850630	IL 1982-65167	19820304
AU 8281164	A1	19820909	AU 1982-81164	19820305
JP 57158745	A2	19820930	JP 1982-35698	19820305
JP 03063559	B4	19911001		
ES 510167	A1	19831016	ES 1982-510167	19820305
ZA 8201491	A	19831026	ZA 1982-1491	19820305
HU 28423	O	19831228	HU 1982-690	19820305
ES 522916	A1	19850301	ES 1983-522916	19830601
PRIORITY APPLN. INFO.:			CH 1981-1531	19810306
			CH 1981-5723	19810904

GI For diagram(s), see printed CA Issue.

AB Peptides RR1NCHR2CONHCH(CH2SR4)CO-Phe-Trp-Lys-X-NHCHR3CH2SR5 [R = inorg. or org. acyl group, R1 = H, alkyl, NCHR2CO moiety = L- or D-Phe (optionally ring substituted by halo, NO2, OH, alkyl, alkoxy); Phe, Trp (D or L) may be ring substituted by NO2, NH2, OH, alkyl, alkoxy; Lys may be .alpha.-N-methylated and .epsilon.-N-alkylated; X = D- or L-.alpha.-amino acid residue optionally .alpha.-N-methylated; R3 = CO2H, CH2OH, carbamoyl, R4 = R5 = H, R4R5 = bond] were prepd. and they control the secretion of somatotropin and inhibit gastric and pancreatic secretion (no data). I was prepd. by deprotection-oxidn. of Me(CH2)8CO-D-Phe-Cys(MBzl)-Phe-D-Trp-Lys(Z)-Thr-Cys(MBzl)-Thr-ol (MBzl = p-MeOC6H4CH2, Z = PhCH2O2C), which was prepd. by peptide coupling in soln.

IT **83795-90-8P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

L80 ANSWER 11 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1982:575266 HCAPLUS

DOCUMENT NUMBER: 97:175266

TITLE: SMS 201-995: a very potent and selective octapeptide analog of somatostatin with prolonged action

AUTHOR(S): Bauer, Wilfried; Briner, Ulrich; Doepfner, Wolfgang; Haller, Roland; Huguenin, Rene; Marbach, Peter; Petcher, Trevor J.; Pless, Janos

CORPORATE SOURCE: Preclin. Res., Sandoz Ltd., Basel, 4002, Switz.

SOURCE: Life Sciences (1982), 31(11), 1133-40

CODEN: LIFSAK; ISSN: 0024-3205

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Cyclic H-D-Phe-Cys-Phe-D-Trp-Lys-Thr-Cys-Thr(ol) (SMS 201-995) [83150-76-9] in vitro is 3 times more potent than the native hormone in inhibiting the secretion of growth hormone. SMS 201-995 is highly resistant to degrdn. by pure enzymes and by tissue homogenates. In vivo in rat and rhesus monkey it is at least 20 times more active than somatostatin [38916-34-6], is much longer acting, and in both species is much more selective in inhibiting the secretion of growth hormone than that of insulin. The compd. is active by several routes of administration including oral and is well-tolerated both in lab. animals and in man.

IT **83214-21-5**

RL: BIOL (Biological study)  
(somatostatin-like activity of, mol. structure in relation to)

L80 ANSWER 12 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1981:587683 HCAPLUS

DOCUMENT NUMBER: 95:187683

TITLE: Octapeptides lowering growth hormone

INVENTOR(S): Sarantakis, Dimitrios

PATENT ASSIGNEE(S): American Home Products Corp., USA

SOURCE: U.S., 4 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4282143	A	19810804	US 1980-159327	19800613
US 4328135	A	19820504	US 1981-233813	19810212
PRIORITY APPLN. INFO.:			US 1980-159327	19800613

GI For diagram(s), see printed CA Issue.

AB R-Cys(R1)-X-X1-Lys-X2-Cys(R2)-R3 (I; R = H-Phe, H-D-Phe, PhCH<sub>2</sub>CH<sub>2</sub>CO; R1 = R2 = H, R1R2 = bond; X = Phe, Tyr, Trp, Met, Leu; X1 = Trp, D-Trp; X2 = Thr, Val, NHCH<sub>2</sub>CO, Phe; R3 = Phe-OH, D-Phe-OH, NHCH<sub>2</sub>CH<sub>2</sub>Ph) were prepd. I inhibited the release of growth hormone (GH) without materially altering blood serum levels of glucagon or insulin. Thus, Me<sub>3</sub>CO<sub>2</sub>C-Phe-Cys(MBzl)-Phe-D-Trp-Lys(CO<sub>2</sub>CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>Cl-2)-Thr(CH<sub>2</sub>Ph)-Cys(MBzl)-D-Phe-OCH<sub>2</sub>-resin (MBzl = CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>OMe-p) was prepd. by the stepwise solid-phase method and then it was resin cleaved and deblocked by HF/anisole to give the linear octapeptide, which was cyclized by oxidn. with K<sub>3</sub>Fe(CN)<sub>6</sub> to give octapeptide cyclic disulfide II. II at 20 .mu.g/kg (s.c.) lowered blood serum levels of GH in rats from 277 mg/mL to 56 ng/mL without significantly altering the levels of glucagon or insulin.

IT **79698-22-9P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and growth hormone release-inhibiting activity of)

IT **79698-23-0P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. and oxidative cyclization of)

IT **79698-21-8DP**, resin-bound  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and resin-cleavage and deblocking of)

L80 ANSWER 13 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1981:587679 HCAPLUS

DOCUMENT NUMBER: 95:187679

TITLE: Polypeptides, pharmaceutical compositions comprising said polypeptides and their use

INVENTOR(S): Bauer, Wilfried; Pless, Janos

PATENT ASSIGNEE(S): Sandoz A.-G., Switz.

SOURCE: Eur. Pat. Appl., 35 pp.  
 CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 29579	A1	19810603	EP 1980-107181	19801119
EP 29579	B1	19830216		
R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
AT 2512	E	19830315	AT 1980-107181	19801119
FI 8003634	A	19810528	FI 1980-3634	19801121
FI 72981	B	19870430		
FI 72981	C	19870810		
DK 8005019	A	19810528	DK 1980-5019	19801125
DK 150146	B	19861215		
DK 150146	C	19870601		
AU 8064688	A1	19810604	AU 1980-64688	19801125
AU 543198	B2	19850404		
ES 497113	A1	19821201	ES 1980-497113	19801125
HU 30257	O	19840328	HU 1980-2817	19801125
HU 185920	B	19850428		
CA 1182109	A1	19850205	CA 1980-365399	19801125

IL 61561	A1	19850228	IL 1980-61561	19801125
CS 228140	P	19840514	CS 1980-8184	19801126
JP 63051159	B4	19881013	JP 1980-167364	19801126
JP 56090048	A2	19810721		
ZA 8007421	A	19820728	ZA 1980-7421	19801127
ES 510751	A1	19830416	ES 1982-510751	19820324
JP 63234000	A2	19880929	JP 1988-57316	19880308
PRIORITY APPLN. INFO.:			CH 1979-10524	19791127
			CH 1980-4574	19800613
			EP 1980-107181	19801119

GI For diagram(s), see printed CA Issue.

AB Peptides RR1NCH(CH2SR2)CO-X-X1-X2-X3-NHCH(CH2SR3)CHR4 [I; R = H, C1-12 alkyl, C1-10 phenylalkyl, R5CO (R5 = H, C1-11 alkyl, Ph, C7-10 phenylalkyl), L- or D-amino acid residue, dipeptide residue, or L- or D-phenylalanine residue optionally ring-substituted by halo, NO2, NH2, OH, C1-3 alkyl, and/or alkoxy; R1 = H, C1-12 alkyl, C7-10 phenylalkyl; R2 = R3 = H; R2R3 = bond; X = Phe optionally ring-substituted by halo, NO2, NH2, OH, C1-3 alkyl, and/or C1-3 alkoxy; X1 = L- or D-Trp optionally N.alpha.-methylated and optionally ring-substituted by NO2, NH2, OH, C1-3 alkyl, and/or C1-3 alkoxy; X2 = Lys optionally N.alpha.-methylated and optionally substituted at .epsilon.-NH2 by C1-3 alkyl; X3 = L- or D-amino acid residue optionally N.alpha.-methylated; R4 = CO2R6 (R6 = H, C1-3 alkyl), CH2OR7 (R7 = H, hydrolyzable ester residue), CONR8R9 [R8 = H, C1-3 alkyl, Ph, C7-10 phenylalkyl; R9 = H, C1-3 alkyl, CHR10R11 [R10 = H, (CH2)nOH (n = 2, 3), or a substituent attached to the .alpha.-carbon of an .alpha.-amino acid; R11 = CO2R6 (R6 = same), CH2OR7 (R7 = same), CONR12R13 (R12 = H, C1-3 alkyl; R13 = H, C1-3 alkyl, Ph, C7-10 phenylalkyl)]], pyrrolidine residue R14 (R11 = same)] were prepd. as inhibitors of the release of growth hormone (GH) and inhibitors of gastric and pancreatic secretions. I can be used in the treatment of diabetes and acromegaly, which are assocd. with excess GH secretion. Thus, Z-Lys(BOC)-Thr-OMe (Z = PhCH2O2C, BOC = CO2CMe3) was Z-deblocked by hydrogenolysis and then coupled to Z-Phe-D-Trp-OH by dicyclohexylcarbodiimide(DDC)/1-hydroxybenzotriazole(HOBT) to give Z-Phe-D-Trp-Lys(BOC)-Thr-OMe, which was Z-deblocked and then coupled to BOC-D-Phe-Cys(MBzl)-OH (MBzl = CH2C6H4OMe-p) by DCC/HOBT to give the protected hexapeptide Me ester, which was treated with NH2NH2 to give BOC-D-Phe-Cys(MBzl)-Phe-D-Trp-Lys(BOC)-Thr-NHNH2 (II). BOC-Cys(MBzl)-OH was coupled to threoninol (H-Thr-ol) to give BOC-Cys(MBzl)-Thr-ol, which was BOC-deblocked and then coupled to II by the azide method to give BOC-D-Phe-Cys(MBzl)-Phe-D-Trp-Lys(BOC)-Thr-Cys(MBzl)-Thr-ol, which was deblocked by CF3CO2H/thioanisole and boron tris(trifluoroacetate)/CF3CO2H and then cyclized by air oxidn. to give cyclic peptide III. I in daily doses of 0.002-20 mg can be used for the treatment of gastrointestinal disorders.

IT **79486-63-8P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

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 PROPERTIES for more information. See STNote 27, Searching Properties  
 in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> d his 181

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 SELECT HIT RN L80 1-13

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 L81 15 S E392-E406

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=> d .seq 181 1-15

L81 ANSWER 1 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN

RN 401912-42-3 REGISTRY

CN L-Phenylalaninamide, N-[(9H-fluoren-9-ylmethoxy)carbonyl]-N-[4-oxo-4-(2-  
 propenyloxy)butyl]-L-phenylalanyl-S-[(acetylamino)methyl]-L-cysteinyl-L-  
 phenylalanyl-1-[(1,1-dimethylethoxy)carbonyl]-D-tryptophyl-N6-[(1,1-  
 dimethylethoxy)carbonyl]-L-lysyl-O-(1,1-dimethylethyl)-L-threonyl-S-  
 [(acetylamino)methyl]-L-cysteinyl-N.alpha.-[3-[[2-  
 propenyloxy)carbonyl]amino]propyl]- (9CI) (CA INDEX NAME)

NTE modified

type	location		description
terminal mod.	Phe-8	-	C-terminal amide
modification	Phe-1	-	undetermined modification
modification	Phe-1	-	(9h-fluoren-9-ylmethoxy) carbonyl
modification	Cys-2	-	(acetylamino)methyl<Acm>
modification	Trp-4	-	(1,1-dimethylethoxy) carbonyl<Boc>
modification	Lys-5	-	(1,1-dimethylethoxy) carbonyl<Boc>
modification	Thr-6	-	1,1-dimethylethyl<t-Bu>
modification	Cys-7	-	(acetylamino)methyl<Acm>
modification	Phe-8	-	undetermined modification

SQL 8

RN 401912-42-3 REGISTRY

REFERENCE 1: 136:210716

L81 ANSWER 2 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN

RN 401912-36-5 REGISTRY

CN L-Phenylalaninamide, N-(3-carboxypropyl)-L-phenylalanyl-L-cysteinyl-L-  
 phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-D-cysteinyl-N.alpha.-(3-  
 aminopropyl)-, (1.fwdarw.8)-lactam, cyclic (2.fwdarw.7)-disulfide (9CI)  
 (CA INDEX NAME)

NTE modified (modifications unspecified)

type	location		description
bridge	Phe-1	- Phe-8	covalent bridge
bridge	Cys-2	- Cys-7	disulfide bridge
stereo	Trp-4	-	D
stereo	Cys-7	-	D

SQL 8

RN 401912-36-5 REGISTRY

REFERENCE 1: 136:210716

L81 ANSWER 3 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN

RN 255872-39-0 REGISTRY

CN L-Lysinamide, D-phenylalanyl-N-(2-carboxyethyl)glycyl-N-(2-carboxyethyl)-L-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-cysteinyl-N-(2-aminoethyl)-L-phenylalanyl-, (2.fwdarw.11), (3.fwdarw.10)-dilactam, cyclic (4.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3227

NTE modified (modifications unspecified)

type	location		description
bridge	Gly-2	- Lys-11	covalent bridge
bridge	Phe-3	- Phe-10	covalent bridge
bridge	Cys-4	- Cys-9	disulfide bridge
stereo	Phe-1	-	D
stereo	Trp-6	-	D

SQL 11

RN 255872-39-0 REGISTRY

REFERENCE 1: 132:108301

L81 ANSWER 4 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN

RN 255872-38-9 REGISTRY

CN L-Phenylalaninamide, N-(3-carboxypropyl)-L-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-cysteinyl-N.alpha.-(3-aminopropyl)-, (1.fwdarw.8)-lactam, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3205

NTE modified (modifications unspecified)

type	location		description
bridge	Phe-1	- Phe-8	covalent bridge
bridge	Cys-2	- Cys-7	disulfide bridge
stereo	Trp-4	-	D

SQL 8

RN 255872-38-9 REGISTRY

REFERENCE 1: 136:210716

REFERENCE 2: 132:108301

L81 ANSWER 5 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN

RN 253791-02-5 REGISTRY

CN L-Cysteine, L-phenylalanyl-L-cysteinyl-L-phenylalanyl-L-tryptophyl-L-lysyl-L-threonyl-L-cysteinyl-L-phenylalanyl-, cyclic (2.fwdarw.7)-disulfide

(9CI) (CA INDEX NAME)

NTE

type	location	description
bridge	Cys-2 - Cys-7	disulfide bridge

SQL 9

RN 253791-02-5 REGISTRY

REFERENCE 1: 132:77604

L81 ANSWER 6 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN

RN 199800-54-9 REGISTRY

CN L-Cysteine, L-phenylalanyl-L-cysteinyl-L-phenylalanyl-L-tryptophyl-L-lysyl-L-threonyl-L-cysteinyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

SQL 9

RN 199800-54-9 REGISTRY

REFERENCE 1: 128:33788

L81 ANSWER 7 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN

RN 88463-68-7 REGISTRY

CN L-Cysteinamide, D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-N-[1-(hydroxymethyl)-2-phenylethyl]-, (S)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

type	location	description
modification	Phe-8	undetermined modification

SQL 8

RN 88463-68-7 REGISTRY

REFERENCE 1: 100:68700

L81 ANSWER 8 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN

RN 88463-63-2 REGISTRY

CN L-Cysteinamide, N-[(1,1-dimethylethoxy)carbonyl]-D-phenylalanyl-S-[(4-methoxyphenyl)methyl]-L-cysteinyl-L-phenylalanyl-D-tryptophyl-N6-[(1,1-dimethylethoxy)carbonyl]-L-lysyl-L-threonyl-N-[1-(hydroxymethyl)-2-phenylethyl]-S-[(4-methoxyphenyl)methyl]-, (S)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

type	location	description
modification	Phe-1	(1,1-dimethylethoxy) carbonyl<Boc>
modification	Cys-2	(4-methoxyphenyl)methyl<MOB>
modification	Lys-5	(1,1-dimethylethoxy) carbonyl<Boc>
modification	Cys-7	(4-methoxyphenyl)methyl<MOB>
modification	Phe-8	undetermined modification

SQL 8

RN 88463-63-2 REGISTRY

REFERENCE 1: 100:68700

L81 ANSWER 9 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN

RN 83795-90-8 REGISTRY

CN L-Phenylalanine, N-(1-oxotetradecyl)-D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-cysteinyl-, methyl ester, cyclic (2.fwdarw.7)-disulfide, monoacetate (salt) (9CI) (CA INDEX NAME)

## OTHER CA INDEX NAMES:

CN 1,2-Dithia-5,8,11,14,17-pentaazacycloeicosane, cyclic peptide deriv.  
 NTE modified (modifications unspecified)

type	location	description
bridge	Cys-2 - Cys-7	disulfide bridge
modification	-	undetermined modification
modification	Phe-1	undetermined modification

SQL 8

RN 83795-90-8 REGISTRY

REFERENCE 1: 98:4797

L81 ANSWER 10 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN

RN 83214-21-5 REGISTRY

CN L-Phenylalanine, D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-cysteinyl-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

## OTHER CA INDEX NAMES:

CN 1,2-Dithia-5,8,11,14,17-pentaazacycloeicosane, cyclic peptide deriv.  
 NTE

type	location	description
bridge	Cys-2 - Cys-7	disulfide bridge

SQL 8

RN 83214-21-5 REGISTRY

REFERENCE 1: 97:175266

L81 ANSWER 11 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN

RN 79698-23-0 REGISTRY

CN D-Phenylalanine, N-[N-[N-[N2-[N-[N-(N-L-phenylalanyl-L-cysteinyl)-L-phenylalanyl]-D-tryptophyl]-L-lysyl]-L-threonyl]-L-cysteinyl]- (9CI) (CA INDEX NAME)

SQL 8

RN 79698-23-0 REGISTRY

REFERENCE 1: 95:187683

L81 ANSWER 12 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN

RN 79698-22-9 REGISTRY

CN D-Phenylalanine, L-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-cysteinyl-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

## OTHER CA INDEX NAMES:

CN 1,2-Dithia-5,8,11,14,17-pentaazacycloeicosane, cyclic peptide deriv.  
 NTE

type	location	description
bridge	Cys-2 - Cys-7	disulfide bridge

SQL 8

RN 79698-22-9 REGISTRY

REFERENCE 1: 107:147527

REFERENCE 2: 101:49288



REFERENCE 3: 95:187683

L81 ANSWER 13 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN

RN 79698-21-8 REGISTRY

CN D-Phenylalanine, N-[N-[N-[N6-[(2-chlorophenyl)methoxy]carbonyl]-N2-[N-[N-[N-[N-[(1,1-dimethylethoxy)carbonyl]-L-phenylalanyl]-S-[(4-methoxyphenyl)methyl]-L-cysteinyl]-L-phenylalanyl]-D-tryptophyl]-L-lysyl]-O-(phenylmethyl)-L-threonyl]-S-[(4-methoxyphenyl)methyl]-L-cysteinyl]-  
(9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

type	location		description
modification	Phe-1	-	(1,1-dimethylethoxy) carbonyl<Boc>
modification	Cys-2	-	(4-methoxyphenyl)methyl<MOB>
modification	Lys-5	-	[(2-chlorophenyl)methoxy] carbonyl<2CZ>
modification	Thr-6	-	phenylmethyl<Bzl>
modification	Cys-7	-	(4-methoxyphenyl)methyl<MOB>

SQL 8

RN 79698-21-8 REGISTRY

REFERENCE 1: 95:187683

L81 ANSWER 14 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN

RN 79486-63-8 REGISTRY

CN L-Cysteinamide, D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-N-[1-(hydroxymethyl)-2-phenylethyl]-, cyclic  
(2.fwdarw.7)-disulfide, (S)-, acetate (salt) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2-Dithia-5,8,11,14,17-pentaazacycloeicosane, cyclic peptide deriv.

NTE modified (modifications unspecified)

type	location		description
bridge	Cys-2	- Cys-7	disulfide bridge
modification	-	-	undetermined modification
modification	Phe-8	-	undetermined modification.

SQL 8

RN 79486-63-8 REGISTRY

REFERENCE 1: 100:23016

REFERENCE 2: 95:187679

L81 ANSWER 15 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN

RN 79486-62-7 REGISTRY

CN L-Cysteinamide, D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-N-[1-(hydroxymethyl)-2-phenylethyl]-, cyclic  
(2.fwdarw.7)-disulfide, (S)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2-Dithia-5,8,11,14,17-pentaazacycloeicosane, cyclic peptide deriv.

NTE modified (modifications unspecified)

type	location		description
bridge	Cys-2	- Cys-7	disulfide bridge
modification	Phe-8	-	undetermined modification

SQL 8

RN 79486-62-7 REGISTRY

REFERENCE 1: 106:770

REFERENCE 2: 100:68700

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 L70 7.SEA FILE=HCAPLUS ABB=ON PLU=ON L69

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L70 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 2002:692513 HCAPLUS  
 DOCUMENT NUMBER: 138:117735  
 TITLE: Human somatostatin receptor specificity of backbone-cyclic analogs containing novel sulfur building units  
 AUTHOR(S): Gazal, Sharon; Gellerman, Gary; Ziv, Ofer; Karpov, Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michel; Gilon, Chaim  
 CORPORATE SOURCE: Department of Organic Chemistry, Hebrew University, Jerusalem, 91904, Israel  
 SOURCE: Peptides: The Wave of the Future, Proceedings of the Second International and the Seventeenth American Peptide Symposium, San Diego, CA, United States, June 9-14, 2001 (2001), 626-627. Editor(s): Lebl, Michal; Houghten, Richard A. American Peptide Society: San Diego, Calif.  
 CODEN: 69DBAL; ISBN: 0-9715560-0-8  
 DOCUMENT TYPE: Conference  
 LANGUAGE: English  
 AB The synthesis and the biol. properties of novel disulfide bridged backbone cyclic somatostatin analogs were examd. These analogs were prepd. to investigate the influence of the ring size and ring chem. on the binding profile of a parent analog named PTR 3173. PTR 3173 is 1000-fold more potent in the in vivo inhibition of growth hormone (GH) than of glucagon and 10,000-fold more potent inhibitor of GH than of insulin release. This

pharmacol. property is ascribed to the unique binding profile of PTR 3173 and it was suggested that the binding to a specific combination of somatostatin receptors and not a single receptor detcs. the physiol. properties of the SST analog. Studies of binding of PTP 73 disulfide-bridged, backbone cyclic analogs to SSTR receptors suggest the effect of ring chem., ring size, and ring position of the peptide template on receptor binding selectivity. The disulfide analogs of PTR 3173 were also highly resistant to a broad spectrum of proteolytic activity compared to somatostatin that was degraded within a few minutes.

IT 252845-42-4, PTR 3197 252845-43-5, PTR 3207

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(somatostatin receptor specificity of backbone-cyclic analogs contg. novel sulfur building units)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L70 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:332670 HCAPLUS

DOCUMENT NUMBER: 136:341003

TITLE: Preparation of conformationally constrained backbone cyclized somatostatin analogs

INVENTOR(S): Hornik, Vered; Afargan, Michel M.; Gellerman, Gary

PATENT ASSIGNEE(S): Israel

SOURCE: U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of Appl. No. PCT/IL99/00329.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 10

PATENT INFORMATION:

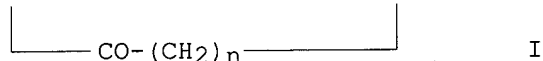
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002052315	A1	20020502	US 2000-734583	20001213
US 6051554	A	20000418	US 1998-100360	19980619
US 6355613	B1	20020312	US 1998-203389	19981202
WO 9965508	A1	19991223	WO 1999-IL329	19990615
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.:  
 US 1998-100360 A2 19980619  
 US 1998-203389 A2 19981202  
 WO 1999-IL329 A2 19990615  
 US 1995-488159 A2 19950607  
 US 1995-569042 A2 19951207  
 US 1996-690609 A2 19960731

OTHER SOURCE(S): MARPAT 136:341003

GI

Q-R5-R6-R7-R8-R9-R10-R11-NR12-X



AB Novel peptides, e.g., I [n = 1-5; X designates a terminal carboxy acid, amide or alc. group; Q is H or a mono- or disaccharide; R5 is .gamma.-aminobutyric acid, diaminobutyric acid, Gly, .beta.-Ala, 5-aminopentanoic acid, or aminohexanoic acid; R6 is D- or L-Phe or Tyr; R7 is D- or L-Trp, -Phe, -1-Nal (1-naphthalenealanine) or -2-Nal, or Tyr; R8 is D- or L-Trp; R9 is D- or L-Lys; R10 is Thr, Gly, Abu (2-aminobutanoic acid), Cys, Val, D- or L-Ala or -Phe; R11 is D- or L-Phe, -Ala, Nle, or Cys; R12 is Gly, Val, Leu, D- or L-Phe or 1Nal or 2Nal], are disclosed which are conformationally constrained backbone cyclized somatostatin analogs having somatostatin receptor sub-type selectivity. Thus, Phe(C3)-Cys\*-Phe-D-Trp-Lys-Thr-Cys\*-Phe-Phe(N3)-OH (PTR 3205), where one bridge connects the two building units (Phe-C3 and Phe N3, which are phenylalanine modified with carboxy or amine and a three carbon methylene spacer) and the second is a disulfide bridge formed between the two Cys residues, was prepd. by the solid-phase method and showed IC50 = 10-6 nM for inhibition of SRIF binding to transmembranal somatostatin receptors SST-R1, SST-R3 and SST-R5.

IT **252845-42-4P**, PTR 3197 **252845-43-5P**, PTR 3207

RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of conformationally constrained backbone cyclized somatostatin analogs)

L70 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:203445 HCAPLUS

DOCUMENT NUMBER: 136:386388

TITLE: Synthesis of novel protected N.alpha.(.omega.-thioalkyl) amino acid building units and their incorporation in backbone cyclic disulfide and thioetheric bridged peptides

AUTHOR(S): Gazal, S.; Gellerman, G.; Glukhov, E.; Gilon, C.

CORPORATE SOURCE: Department of Organic Chemistry, Hebrew University, Jerusalem, Israel

SOURCE: Journal of Peptide Research (2001), 58(6), 527-539  
CODEN: JPERFA; ISSN: 1397-002X

PUBLISHER: Munksgaard International Publishers Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB General methods for the prepn. of protected N.alpha.(.omega.-thioalkyl) amino acids building units for backbone cyclization using reductive alkylation and on-resin prepn. are described. The synthesis of non-Gly Fmoc-protected S-functionalized N-alkylated amino acids is based on the reaction of readily prepd. protected .omega.-thio aldehyde with the appropriate amino acid. Prepn. of Fmoc-protected S-functionalized N-alkylated Gly building units was carried out using two methods: reaction of glyoxylic acid with AcM-thioalkylamine and an on-resin reaction of bromoacetyl resin with Trt-thioalkylamines. Three model peptides were prepd. using these building units. The GlyS2 building unit was incorporated into a backbone cyclic analog of somatostatin that contains a disulfide bridge. Formation of the disulfide bridge was performed by on-resin oxidn. using I2 or TI(CF3COO-)-3. Both methods resulted in the desired product in a high degree of purity in the crude. The AspS3 building unit was also successfully incorporated into a model peptide. In addn., the in situ generation of sulfur contg. Gly building units was demonstrated on a Substance P backbone cyclic analog contg. a thioether bridge.

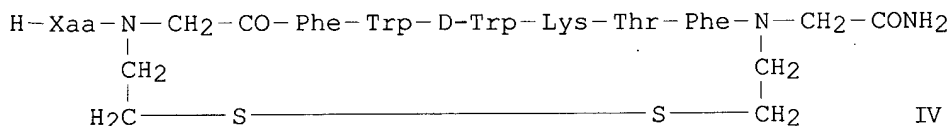
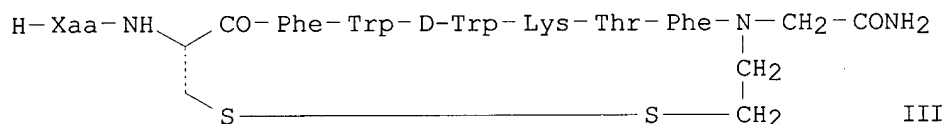
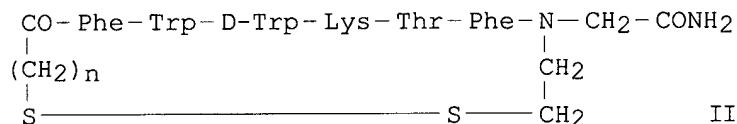
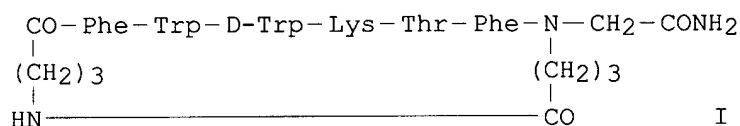
IT **252845-42-4P**

RL: SPN (Synthetic preparation); PREP (Preparation)

(synthesis of protected thioalkyl amino acids for incorporation in backbone cyclic disulfide and thioetheric bridged peptides using reductive alkylation and on-resin oxidn.)

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L70 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 2002:197431 HCAPLUS  
 DOCUMENT NUMBER: 136:386384  
 TITLE: Human Somatostatin Receptor Specificity of Backbone-Cyclic Analogues Containing Novel Sulfur Building Units  
 AUTHOR(S): Gazal, Sharon; Gelerman, Garry; Ziv, Ofer; Karpov, Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michel; Gilon, Chaim  
 CORPORATE SOURCE: Department of Organic Chemistry, Hebrew University, Jerusalem, 91904, Israel  
 SOURCE: Journal of Medicinal Chemistry (2002), 45(8), 1665-1671  
 CODEN: JMCMAR; ISSN: 0022-2623  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



AB Somatostatin-14 (somatostatin) and its clin. available analogs (octreotide, lanreotide and vapreotide) are potent inhibitors of growth hormone, insulin, and glucagon release. Recently, the synthesis of PTR-3173 (I), a novel cyclic somatostatin analog with in vivo endocrine selectivity, was described. I exhibited high affinity to human recombinant somatostatin receptors (hsst) hsst2, hsst4 and hsst5. Its novel binding profile included potent in vivo inhibition of growth hormone but not of insulin release. Here, the synthesis, bioactivity, and structure-activity relationship studies of peptides II (n = 1, 2), III (Xaa = nil, D-Phe) and IV (Xaa = nil, D-Phe, D-Nal) are reported and compared to those of I. In II-IV, the lactam bridge of I was replaced by a backbone disulfide bridge. II-IV showed significant metabolic stability as tested in various enzyme mixts. The receptor binding assays for II-IV

revealed that their selectivity had increased towards hsst2 and hsst5, but decreased towards hsst4 in comparison to I. In addn., this work also described the synthesis of sulfur-contg. building units, such as: Acm-S-CH<sub>2</sub>CH<sub>2</sub>N(Fmoc)CH<sub>2</sub>CO<sub>2</sub>H (Acm = acetamidomethyl), for incorporation into peptides as groups capable of forming disulfide bridges.

IT 252845-42-4P 252845-43-5P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(prepn. and receptor-binding activity of disulfide-bridged somatostatin analogs)

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L70 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:182173 HCAPLUS

DOCUMENT NUMBER: 136:227293

TITLE: Selectivity of conformationally constrained backbone cyclized somatostatin analogs with respect to insulin, GH, and glucagon secretion and somatostatin receptor binding

INVENTOR(S): Hornik, Vered; Gellerman, Gary; Afargan, Mich El M.

PATENT ASSIGNEE(S): Peptor Limited, Israel

SOURCE: U.S., 21 pp., Cont.-in-part of U.S. 6,051,554.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 10

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6355613	B1	20020312	US 1998-203389	19981202
US 6051554	A	20000418	US 1998-100360	19980619
CA 2335488	AA	19991223	CA 1999-2335488	19990615
WO 9965508	A1	19991223	WO 1999-IL329	19990615
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9942884	A1	20000105	AU 1999-42884	19990615
AU 747515	B2	20020516		
EP 1085896	A1	20010328	EP 1999-957020	19990615
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002518339	T2	20020625	JP 2000-554387	19990615
US 2002052315	A1	20020502	US 2000-734583	20001213
PRIORITY APPLN. INFO.:				
			US 1996-690609	A2 19960731
			US 1998-100360	A2 19980619
			US 1995-488159	A2 19950607
			US 1995-569042	A2 19951207
			US 1998-203389	A 19981202
			WO 1999-IL329	W 19990615

OTHER SOURCE(S): MARPAT 136:227293

AB Novel peptides which are conformationally constrained backbone cyclized somatostatin analogs. Methods for synthesizing the somatostatin analogs and for producing libraries of the somatostatin analogs are also disclosed. Furthermore, pharmaceutical compns. comprising somatostatin analogs, and methods of using such compns. are disclosed.

## IT 252845-42-4P

RL: BSU (Biological study, unclassified); CPN (Combinatorial preparation); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); USES (Uses)  
(selectivity of conformationally constrained backbone cyclized somatostatin analogs with respect to insulin, GH, and glucagon secretion and somatostatin receptor binding)

REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L70 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:783790 HCAPLUS

DOCUMENT NUMBER: 136:151429

TITLE: A bioactive somatostatin analog without a type II' .beta.-turn: synthesis and conformational analysis in solution

AUTHOR(S): Jiang, Shaokai; Gazal, Sharon; Gelerman, Gary; Ziv, Ofer; Karpov, Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michael; Gilon, Chaim; Goodman, Murray

CORPORATE SOURCE: Department of Chemistry and Biochemistry, University of California, San Diego, La Jolla, CA, USA

SOURCE: Journal of Peptide Science (2001), 7(10), 521-528, 2 plates

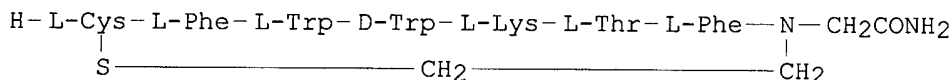
CODEN: JPSIEI; ISSN: 1075-2617

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



I

AB A cyclic somatostatin analog I has been synthesized. Biol. assays show that this compd. has strong binding affinities to somatostatin hsst2 and hsst5 receptor subtypes (5.2 and 1.2 nM, resp., and modest affinity to hsst4 (41.1 nM)). Our conformational anal. carried out in DMSO-d6 indicates that this compd. exists as two structures arising from the trans and cis configurations of the peptide bond between Phe7 and N-alkylated Gly8. However, neither conformer exhibits a type II' .beta.-turn. This is the first report of a potent bioactive somatostatin analog that does not exhibit a type II' .beta.-turn in soln. Mol. dynamics simulations (500 ps) carried out at 300 K indicate that the backbone of compd. I is more flexible than other cyclic somatostatin analogs formed by disulfide bonds.

## IT 252845-42-4P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(solid phase peptide synthesis and conformation by NMR of bioactive somatostatin analog without type II .beta.-turn)

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L70 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:811096 HCAPLUS

DOCUMENT NUMBER: 132:50250

TITLE: Preparation of conformationally constrained backbone cyclized somatostatin analogs

INVENTOR(S): Hornik, Vered; Afargan, Michel M.; Gellerman, Gary

PATENT ASSIGNEE(S): Peptor Ltd., Israel

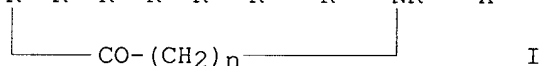


SOURCE: PCT Int. Appl., 82 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 10  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9965508	A1	19991223	WO 1999-IL329	19990615
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6051554	A	20000418	US 1998-100360	19980619
US 6355613	B1	20020312	US 1998-203389	19981202
CA 2335488	AA	19991223	CA 1999-2335488	19990615
AU 9942884	A1	20000105	AU 1999-42884	19990615
AU 747515	B2	20020516		
EP 1085896	A1	20010328	EP 1999-957020	19990615
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002518339	T2	20020625	JP 2000-554387	19990615
US 2002052315	A1	20020502	US 2000-734583	20001213
PRIORITY APPLN. INFO.:				
			US 1998-100360	A 19980619
			US 1998-203389	A 19981202
			US 1995-488159	A2 19950607
			US 1995-569042	A2 19951207
			US 1996-690609	A2 19960731
			WO 1999-IL329	W 19990615

OTHER SOURCE(S): MARPAT 132:50250  
 GI

Q-R<sup>5</sup>-R<sup>6</sup>-R<sup>7</sup>-R<sup>8</sup>-R<sup>9</sup>-R<sup>10</sup>-R<sup>11</sup>-NR<sup>12</sup>-X



AB Novel peptides, e.g., I [n = 1-5; X designates a terminal carboxy acid, amide or alc. group; Q is H or a mono- or disaccharide; R<sup>5</sup> is .gamma.-aminobutyric acid, diaminobutyric acid, Gly, .beta.-Ala, 5-aminopentanoic acid, or aminohexanoic acid; R<sup>6</sup> is D- or L-Phe or Tyr; R<sup>7</sup> is D- or L-Trp, -Phe, -1-Nal (1-naphthalenealanine) or -2-Nal, or Tyr; R<sup>8</sup> is D- or L-Trp; R<sup>9</sup> is D- or L-Lys; R<sup>10</sup> is Thr, Gly, Abu (2-aminobutanoic acid), Cys, Val, D- or L-Ala or -Phe; R<sup>11</sup> is D- or L-Phe, -Ala, Nle, or Cys; R<sup>12</sup> is Gly, Val, Leu, D- or L-Phe or 1-Nal or 2-Nal], are disclosed which are conformationally constrained backbone cyclized somatostatin analogs having somatostatin receptor sub-type selectivity. Thus, Phe(C3)-Cys\*-Phe-D-Trp-Lys-Thr-Cys\*-Phe-Phe(N3)-OH (PTR 3205), where one bridge connects the two building units (Phe-C3 and Phe N3, which are phenylalanine modified with carboxy or amine and a three carbon methylene spacer) and the second is a disulfide bridge formed between the two Cys residues, was prepd. by the solid-phase method and showed IC<sub>50</sub> = 10-6 nM for inhibition of SRIF binding to transmembranal somatostatin receptors SST-R1, SST-R3 and SST-R5.

IT 252845-42-4P, PTR 3197 252845-43-5P, PTR 3207

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of conformationally constrained backbone cyclized somatostatin analogs)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> fil reg

FILE 'REGISTRY' ENTERED AT 11:40:26 ON 22 JUL 2003

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STRUCTURE FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7

DICTIONARY FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:n

=> d .seq .169 1-2

L69 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2003 ACS on STN

RN 252845-43-5 REGISTRY

CN Glycinamide, D-phenylalanyl-L-cysteinyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (2.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3207

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge	Cys-2	-	Gly-9	covalent bridge
stereo	Phe-1	-		D
stereo	Trp-5	-		D

SQL 9

SEQ 1 FCFWWKTFG

=====

HITS AT: 2-9

REFERENCE 1: 138:117735

REFERENCE 2: 136:386384

REFERENCE 3: 136:341003

REFERENCE 4: 132:50250

L69 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2003 ACS on STN

RN 252845-42-4 REGISTRY

CN Glycinamide, L-cysteinyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic  
(1.fwdarw.8)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3197

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge		Cys-1	- Gly-8	covalent bridge
stereo		Trp-4	-	D

SQL 8

SEQ 1 CFWWKTFG

HITS AT: 1-8

REFERENCE 1: 138:117735

REFERENCE 2: 136:386388

REFERENCE 3: 136:386384

REFERENCE 4: 136:341003

REFERENCE 5: 136:227293

REFERENCE 6: 136:151429

REFERENCE 7: 132:50250

=> fil hcaplus  
 FILE 'HCAPLUS' ENTERED AT 11:49:45 ON ~~22 JUL 2003~~  
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FILE COVERS 1907 - 22 Jul 2003 VOL 139 ISS 4  
 FILE LAST UPDATED: 21 Jul 2003 (20030721/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L77 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 2002:692513 HCAPLUS  
 DOCUMENT NUMBER: 138:117735  
 TITLE: Human somatostatin receptor specificity of backbone-cyclic analogs containing novel sulfur building units  
 AUTHOR(S): Gazal, Sharon; Gellerman, Gary; Ziv, Ofer; Karpov, Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michel; Gilon, Chaim  
 CORPORATE SOURCE: Department of Organic Chemistry, Hebrew University, Jerusalem, 91904, Israel  
 SOURCE: Peptides: The Wave of the Future, Proceedings of the Second International and the Seventeenth American Peptide Symposium, San Diego, CA, United States, June 9-14, 2001 (2001), 626-627. Editor(s): Lebl, Michal; Houghten, Richard A. American Peptide Society: San Diego, Calif.  
 CODEN: 69DBAL; ISBN: 0-9715560-0-8  
 DOCUMENT TYPE: Conference  
 LANGUAGE: English  
 AB The synthesis and the biol. properties of novel disulfide bridged backbone cyclic somatostatin analogs were examd. These analogs were prep'd. to

investigate the influence of the ring size and ring chem. on the binding profile of a parent analog named PTR 3173. PTR 3173 is 1000-fold more potent in the in vivo inhibition of growth hormone (GH) than of glucagon and 10,000-fold more potent inhibitor of GH than of insulin release. This pharmacol. property is ascribed to the unique binding profile of PTR 3173 and it was suggested that the binding to a specific combination of somatostatin receptors and not a single receptor detcs. the physiol. properties of the SST analog. Studies of binding of PTP 73 disulfide-bridged, backbone cyclic analogs to SST receptors suggest the effect of ring chem., ring size, and ring position of the peptide template on receptor binding selectivity. The disulfide analogs of PTR 3173 were also highly resistant to a broad spectrum of proteolytic activity compared to somatostatin that was degraded within a few minutes.

IT 252845-43-5, PTR 3207

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(somatostatin receptor specificity of backbone-cyclic analogs contg. novel sulfur building units)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L77 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:332670 HCAPLUS

DOCUMENT NUMBER: 136:341003

TITLE: Preparation of conformationally constrained backbone cyclized somatostatin analogs

INVENTOR(S): Hornik, Vered; Afargan, Michel M.; Gellerman, Gary

PATENT ASSIGNEE(S): Israel

SOURCE: U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of Appl. No. PCT/IL99/00329.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 10

PATENT INFORMATION:

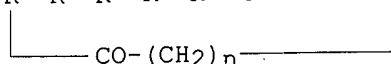
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002052315	A1	20020502	US 2000-734583	20001213
US 6051554	A	20000418	US 1998-100360	19980619
US 6355613	B1	20020312	US 1998-203389	19981202
WO 9965508	A1	19991223	WO 1999-IL329	19990615
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.:  
 US 1998-100360 A2 19980619  
 US 1998-203389 A2 19981202  
 WO 1999-IL329 A2 19990615  
 US 1995-488159 A2 19950607  
 US 1995-569042 A2 19951207  
 US 1996-690609 A2 19960731

OTHER SOURCE(S): MARPAT 136:341003

GI

Q-R5-R6-R7-R8-R9-R10-R11-NR12-X



I

AB Novel peptides, e.g., I [n = 1-5; X designates a terminal carboxy acid, amide or alc. group; Q is H or a mono- or disaccharide; R5 is .gamma.-aminobutyric acid, diaminobutyric acid, Gly, .beta.-Ala, 5-aminopentanoic acid, or aminohexanoic acid; R6 is D- or L-Phe or Tyr; R7 is D- or L-Trp, -Phe, -1-Nal (1-naphthalenealanine) or -2-Nal, or Tyr; R8 is D- or L-Trp; R9 is D- or L-Lys; R10 is Thr, Gly, Abu (2-aminobutanoic acid), Cys, Val, D- or L-Ala or -Phe; R11 is D- or L-Phe, -Ala, Nle, or Cys; R12 is Gly, Val, Leu, D- or L-Phe or 1Nal or 2Nal], are disclosed which are conformationally constrained backbone cyclized somatostatin analogs having somatostatin receptor sub-type selectivity. Thus, Phe(C3)-Cys\*-Phe-D-Trp-Lys-Thr-Cys\*-Phe-Phe(N3)-OH (PTR 3205), where one bridge connects the two building units (Phe-C3 and Phe N3, which are phenylalanine modified with carboxy or amine and a three carbon methylene spacer) and the second is a disulfide bridge formed between the two Cys residues, was prepd. by the solid-phase method and showed IC50 = 10-6 nM for inhibition of SRIF binding to transmembranal somatostatin receptors SST-R1, SST-R3 and SST-R5.

IT 252845-43-5P, PTR 3207

RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of conformationally constrained backbone cyclized somatostatin analogs)

L77 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:197431 HCAPLUS

DOCUMENT NUMBER: 136:386384

TITLE: Human Somatostatin Receptor Specificity of  
Backbone-Cyclic Analogues Containing Novel Sulfur  
Building Units

AUTHOR(S): Gazal, Sharon; Gelerman, Garry; Ziv, Ofer; Karpov,  
Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michel;  
Gilon, Chaim

CORPORATE SOURCE: Department of Organic Chemistry, Hebrew University,  
Jerusalem, 91904, Israel

SOURCE: Journal of Medicinal Chemistry (2002), 45(8),  
1665-1671

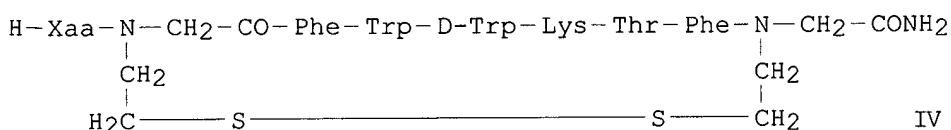
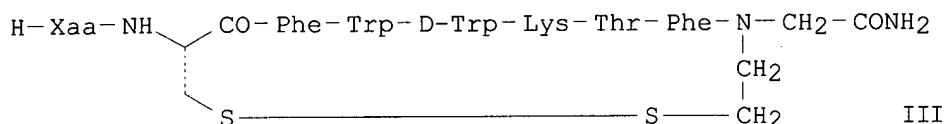
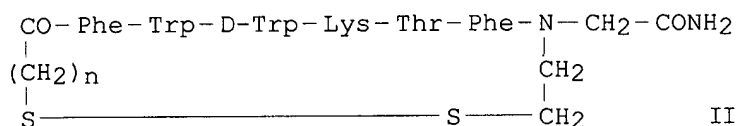
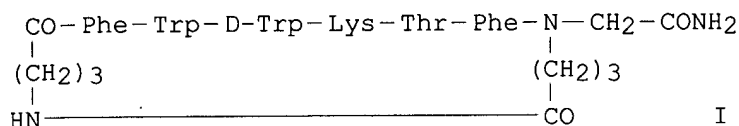
CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB Somatostatin-14 (somatostatin) and its clin. available analogs (octreotide, lanreotide and vapreotide) are potent inhibitors of growth hormone, insulin, and glucagon release. Recently, the synthesis of PTR-3173 (I), a novel cyclic somatostatin analog with in vivo endocrine selectivity, was described. I exhibited high affinity to human recombinant somatostatin receptors (hsst) hsst2, hsst4 and hsst5. Its novel binding profile included potent in vivo inhibition of growth hormone but not of insulin release. Here, the synthesis, bioactivity, and structure-activity relationship studies of peptides II (n = 1, 2), III (Xaa = nil, D-Phe) and IV (Xaa = nil, D-Phe, D-Nal) are reported and compared to those of I. In II-IV, the lactam bridge of I was replaced by a backbone disulfide bridge. II-IV showed significant metabolic stability as tested in various enzyme mixts. The receptor binding assays for II-IV revealed that their selectivity had increased towards hsst2 and hsst5, but decreased towards hsst4 in comparison to I. In addn., this work also described the synthesis of sulfur-contg. building units, such as Acn-S-CH<sub>2</sub>CH<sub>2</sub>N(Fmoc)CH<sub>2</sub>CO<sub>2</sub>H (Acn = acetamidomethyl), for incorporation into peptides as groups capable of forming disulfide bridges.

IT 252845-43-5P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(prepn. and receptor-binding activity of disulfide-bridged somatostatin analogs)

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L77 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:811096 HCAPLUS

DOCUMENT NUMBER: 132:50250

TITLE: Preparation of conformationally constrained backbone cyclized somatostatin analogs

INVENTOR(S): Hornik, Vered; Afargan, Michel M.; Gellerman, Gary

PATENT ASSIGNEE(S): Peptor Ltd., Israel

SOURCE: PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 10

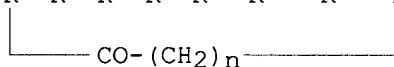
## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9965508	A1	19991223	WO 1999-IL329	19990615
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6051554	A	20000418	US 1998-100360	19980619
US 6355613	B1	20020312	US 1998-203389	19981202
CA 2335488	AA	19991223	CA 1999-2335488	19990615
AU 9942884	A1	20000105	AU 1999-42884	19990615
AU 747515	B2	20020516		
EP 1085896	A1	20010328	EP 1999-957020	19990615
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002518339	T2	20020625	JP 2000-554387	19990615
US 2002052315	A1	20020502	US 2000-734583	20001213
PRIORITY APPLN. INFO.:			US 1998-100360	A 19980619
			US 1998-203389	A 19981202
			US 1995-488159	A2 19950607
			US 1995-569042	A2 19951207
			US 1996-690609	A2 19960731
			WO 1999-IL329	W 19990615

OTHER SOURCE(S): MARPAT 132:50250

GI

Q-R5-R6-R7-R8-R9-R10-R11-NR12-X



I

AB Novel peptides, e.g., I [n = 1-5; X designates a terminal carboxy acid, amide or alc. group; Q is H or a mono- or disaccharide; R5 is .gamma.-aminobutyric acid, diaminobutyric acid, Gly, .beta.-Ala, 5-aminopentanoic acid, or aminohexanoic acid; R6 is D- or L-Phe or Tyr; R7 is D- or L-Trp, -Phe, -1-Nal (1-naphthalenealanine) or -2-Nal, or Tyr; R8 is D- or L-Trp; R9 is D- or L-Lys; R10 is Thr, Gly, Abu (2-aminobutanoic acid), Cys, Val, D- or L-Ala or -Phe; R11 is D- or L-Phe, -Ala, Nle, or Cys; R12 is Gly, Val, Leu, D- or L-Phe or 1Nal or 2Nal], are disclosed which are conformationally constrained backbone cyclized somatostatin analogs having somatostatin receptor sub-type selectivity. Thus, Phe(C3)-Cys\*-Phe-D-Trp-Lys-Thr-Cys\*-Phe-Phe(N3)-OH (PTR 3205), where one bridge connects the two building units (Phe-C3 and Phe N3, which are phenylalanine modified with carboxy or amine and a three carbon methylene spacer) and the second is a disulfide bridge formed between the two Cys residues, was prepd. by the solid-phase method and showed IC50 = 10<sup>-6</sup> nM for inhibition of SRIF binding to transmembranial somatostatin receptors SST-R1, SST-R3 and SST-R5.

IT 252845-43-5P, PTR 3207

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)



(prepn. of conformationally constrained backbone cyclized somatostatin analogs)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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DICTIONARY FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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=> d .seq 176 tot

L76 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 252845-43-5 REGISTRY  
CN Glycinamide, D-phenylalanyl-L-cysteinyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (2.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3207

NTE modified (modifications unspecified)

type	-----	location	-----	description
bridge	Cys-2	-	Gly-9	covalent bridge
stereo	Phe-1	-		D
stereo	Trp-5	-		D

SQL 9  
FS PROTEIN SEQUENCE; STEREOSEARCH  
SQL 9

SEQ 1 FCFWWKTFG

HITS AT: 1-9

REFERENCE 1: 138:117735

REFERENCE 2: 136:386384  
REFERENCE 3: 136:341003  
REFERENCE 4: 132:50250

=> fil hcaplus  
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FILE COVERS 1907 - 22 Jul 2003 VOL 139 ISS 4  
 FILE LAST UPDATED: 21 Jul 2003 (20030721/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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 L75 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L74

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L75 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 2002:692513 HCAPLUS  
 DOCUMENT NUMBER: 138:117735  
 TITLE: Human somatostatin receptor specificity of backbone-cyclic analogs containing novel sulfur building units  
 AUTHOR(S): Gazal, Sharon; Gellerman, Gary; Ziv, Ofer; Karpov, Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michel; Gilon, Chaim  
 CORPORATE SOURCE: Department of Organic Chemistry, Hebrew University, Jerusalem, 91904, Israel  
 SOURCE: Peptides: The Wave of the Future, Proceedings of the Second International and the Seventeenth American Peptide Symposium, San Diego, CA, United States, June 9-14, 2001 (2001), 626-627. Editor(s): Lebl, Michal; Houghten, Richard A. American Peptide Society: San Diego, Calif.  
 CODEN: 69DBAL; ISBN: 0-9715560-0-8  
 DOCUMENT TYPE: Conference  
 LANGUAGE: English  
 AB The synthesis and the biol. properties of novel disulfide bridged backbone cyclic somatostatin analogs were examd. These analogs were prepd. to investigate the influence of the ring size and ring chem. on the binding profile of a parent analog named PTR 3173. PTR 3173 is 1000-fold more potent in the in vivo inhibition of growth hormone (GH) than of glucagon and 10,000-fold more potent inhibitor of GH than of insulin release. This

pharmacol. property is ascribed to the unique binding profile of PTR 3173 and it was suggested that the binding to a specific combination of somatostatin receptors and not a single receptor detcs. the physiol. properties of the SST analog. Studies of binding of PTP 73 disulfide-bridged, backbone cyclic analogs to SSTR receptors suggest the effect of ring chem., ring size, and ring position of the peptide template on receptor binding selectivity. The disulfide analogs of PTR 3173 were also highly resistant to a broad spectrum of proteolytic activity compared to somatostatin that was degraded within a few minutes.

IT 252845-43-5, PTR 3207

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(somatostatin receptor specificity of backbone-cyclic analogs contg. novel sulfur building units)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L75 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:332670 HCAPLUS

DOCUMENT NUMBER: 136:341003

TITLE: Preparation of conformationally constrained backbone cyclized somatostatin analogs

INVENTOR(S): Hornik, Vered; Afargan, Michel M.; Gellerman, Gary

PATENT ASSIGNEE(S): Israel

SOURCE: U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of Appl. No. PCT/IL99/00329.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 10

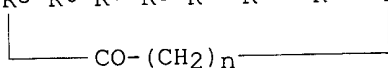
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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 6051554	A	20000418	US 1998-100360	19980619
US 6355613	B1	20020312	US 1998-203389	19981202
WO 9965508	A1	19991223	WO 1999-IL329	19990615
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.:  
 US 1998-100360 A2 19980619  
 US 1998-203389 A2 19981202  
 WO 1999-IL329 A2 19990615  
 US 1995-488159 A2 19950607  
 US 1995-569042 A2 19951207  
 US 1996-690609 A2 19960731

OTHER SOURCE(S): MARPAT 136:341003  
 GI

Q-R5-R6-R7-R8-R9-R10-R11-NR12-X



I

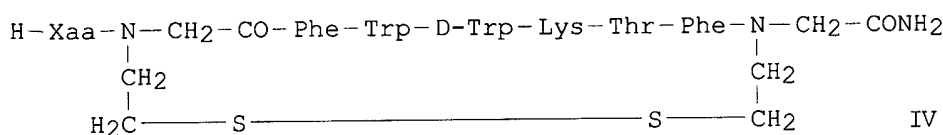
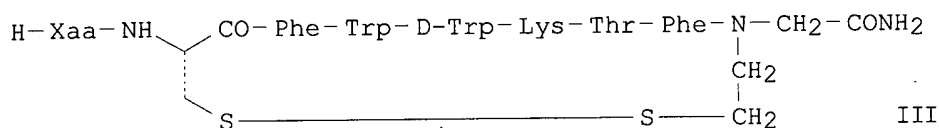
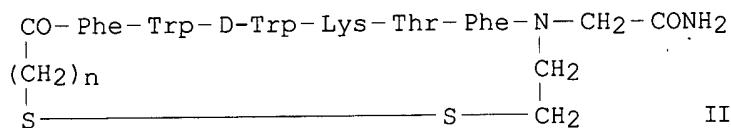
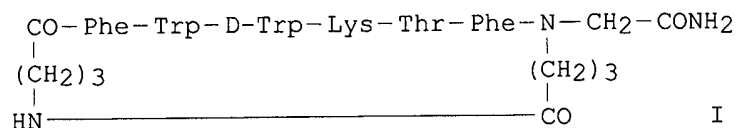
AB Novel peptides, e.g., I [n = 1-5; X designates a terminal carboxy acid, amide or alc. group; Q is H or a mono- or disaccharide; R5 is .gamma.-aminobutyric acid, diaminobutyric acid, Gly, .beta.-Ala, 5-aminopentanoic acid, or aminohexanoic acid; R6 is D- or L-Phe or Tyr; R7 is D- or L-Trp, -Phe, -1-Nal (1-naphthalenealanine) or -2-Nal, or Tyr; R8 is D- or L-Trp; R9 is D- or L-Lys; R10 is Thr, Gly, Abu (2-aminobutanoic acid), Cys, Val, D- or L-Ala or -Phe; R11 is D- or L-Phe, -Ala, Nle, or Cys; R12 is Gly, Val, Leu, D- or L-Phe or 1Nal or 2Nal], are disclosed which are conformationally constrained backbone cyclized somatostatin analogs having somatostatin receptor sub-type selectivity. Thus, Phe(C3)-Cys\*-Phe-D-Trp-Lys-Thr-Cys\*-Phe-Phe(N3)-OH (PTR 3205), where one bridge connects the two building units (Phe-C3 and Phe N3, which are phenylalanine modified with carboxy or amine and a three carbon methylene spacer) and the second is a disulfide bridge formed between the two Cys residues, was prepd. by the solid-phase method and showed IC50 = 10-6 nM for inhibition of SRIF binding to transmembranal somatostatin receptors SST-R1, SST-R3 and SST-R5.

IT **252845-43-5P**, PTR 3207

RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of conformationally constrained backbone cyclized somatostatin analogs)

L75 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:197431 HCAPLUS  
DOCUMENT NUMBER: 136:386384  
TITLE: Human Somatostatin Receptor Specificity of  
Backbone-Cyclic Analogues Containing Novel Sulfur  
Building Units  
AUTHOR(S): Gazal, Sharon; Gelerman, Garry; Ziv, Ofer; Karpov,  
Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michel;  
Gilon, Chaim  
CORPORATE SOURCE: Department of Organic Chemistry, Hebrew University,  
Jerusalem, 91904, Israel  
SOURCE: Journal of Medicinal Chemistry (2002), 45(8),  
1665-1671  
CODEN: JMCMAR; ISSN: 0022-2623  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



AB Somatostatin-14 (somatostatin) and its clin. available analogs (octreotide, lanreotide and vapreotide) are potent inhibitors of growth hormone, insulin, and glucagon release. Recently, the synthesis of PTR-3173 (I), a novel cyclic somatostatin analog with in vivo endocrine selectivity, was described. I exhibited high affinity to human recombinant somatostatin receptors (hsst) hsst2, hsst4 and hsst5. Its novel binding profile included potent in vivo inhibition of growth hormone but not of insulin release. Here, the synthesis, bioactivity, and structure-activity relationship studies of peptides II (n = 1, 2), III (Xaa = nil, D-Phe) and IV (Xaa = nil, D-Phe, D-Nal) are reported and compared to those of I. In II-IV, the lactam bridge of I was replaced by a backbone disulfide bridge. II-IV showed significant metabolic stability as tested in various enzyme mixts. The receptor binding assays for II-IV revealed that their selectivity had increased towards hsst2 and hsst5, but decreased towards hsst4 in comparison to I. In addn., this work also described the synthesis of sulfur-contg. building units, such as Acn-S-CH<sub>2</sub>CH<sub>2</sub>N(Fmoc)CH<sub>2</sub>CO<sub>2</sub>H (Acn = acetamidomethyl), for incorporation into peptides as groups capable of forming disulfide bridges.

IT 252845-43-5P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);  
 BIOL (Biological study); PREP (Preparation)  
 (prepn. and receptor-binding activity of disulfide-bridged somatostatin analogs)

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L75 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:811096 HCAPLUS

DOCUMENT NUMBER: 132:50250

TITLE: Preparation of conformationally constrained backbone cyclized somatostatin analogs

INVENTOR(S): Hornik, Vered; Afargan, Michel M.; Gellerman, Gary

PATENT ASSIGNEE(S): Peptor Ltd., Israel

SOURCE: PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 10  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9965508	A1	19991223	WO 1999-IL329	19990615
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6051554	A	20000418	US 1998-100360	19980619
US 6355613	B1	20020312	US 1998-203389	19981202
CA 2335488	AA	19991223	CA 1999-2335488	19990615
AU 9942884	A1	20000105	AU 1999-42884	19990615
AU 747515	B2	20020516		
EP 1085896	A1	20010328	EP 1999-957020	19990615
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
JP 2002518339	T2	20020625	JP 2000-554387	19990615
US 2002052315	A1	20020502	US 2000-734583	20001213
PRIORITY APPLN. INFO.:			US 1998-100360	A 19980619
			US 1998-203389	A 19981202
			US 1995-488159	A2 19950607
			US 1995-569042	A2 19951207
			US 1996-690609	A2 19960731
			WO 1999-IL329	W 19990615

OTHER SOURCE(S): MARPAT 132:50250  
GI

Q-R<sup>5</sup>-R<sup>6</sup>-R<sup>7</sup>-R<sup>8</sup>-R<sup>9</sup>-R<sup>10</sup>-R<sup>11</sup>-NR<sup>12</sup>-X



AB Novel peptides, e.g., I [n = 1-5; X designates a terminal carboxy acid, amide or alc. group; Q is H or a mono- or disaccharide; R<sup>5</sup> is .gamma.-aminobutyric acid, diaminobutyric acid, Gly, .beta.-Ala, 5-aminopentanoic acid, or aminohexanoic acid; R<sup>6</sup> is D- or L-Phe or Tyr; R<sup>7</sup> is D- or L-Trp, -Phe, -1-Nal (1-naphthalenealanine) or -2-Nal, or Tyr; R<sup>8</sup> is D- or L-Trp; R<sup>9</sup> is D- or L-Lys; R<sup>10</sup> is Thr, Gly, Abu (2-aminobutanoic acid), Cys, Val, D- or L-Ala or -Phe; R<sup>11</sup> is D- or L-Phe, -Ala, Nle, or Cys; R<sup>12</sup> is Gly, Val, Leu, D- or L-Phe or 1Nal or 2Nal], are disclosed which are conformationally constrained backbone cyclized somatostatin analogs having somatostatin receptor sub-type selectivity. Thus, Phe(C3)-Cys\*-Phe-D-Trp-Lys-Thr-Cys\*-Phe-Phe(N3)-OH (PTR 3205), where one bridge connects the two building units (Phe-C3 and Phe N3, which are phenylalanine modified with carboxy or amine and a three carbon methylene spacer) and the second is a disulfide bridge formed between the two Cys residues, was prepd. by the solid-phase method and showed IC<sub>50</sub> = 10<sup>-6</sup> nM for inhibition of SRIF binding to transmembranal somatostatin receptors SST-R1, SST-R3 and SST-R5.

IT 252845-43-5P, PTR 3207

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of conformationally constrained backbone cyclized somatostatin analogs)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7  
DICTIONARY FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNnote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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L74 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN

RN 252845-43-5 REGISTRY

CN Glycinamide, D-phenylalanyl-L-cysteinyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (2.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3207

NTE modified (modifications unspecified)

type	location	description
bridge	Cys-2 - Gly-9	covalent bridge
stereo	Phe-1 -	D
stereo	Trp-5 -	D

SQL 9

SEQ 1 FCFWWKTFG

HITS AT: 1-9

REFERENCE 1: 138:117735

REFERENCE 2: 136:386384



REFERENCE 3: 136:341003

REFERENCE 4: 132:50250